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THE UNIVERSITY OF ALBERTA

AN ANALYSIS OF THE WORK-WEEK OF A SAMPLE OF  
CENTRAL ALBERTA HIGH SCHOOL TEACHERS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF EDUCATION

DIVISION OF EDUCATIONAL ADMINISTRATION

by

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## ABSTRACT OF THESIS

Teaching load is one of the factors in promoting or destroying teacher morale. Teachers who feel overloaded either in actual working time or in comparison to some other teacher will not take the same interest in their work as would normally be expected. This results in decreased teacher efficiency. A knowledge of what teaching loads are and what it is felt that they should be will aid administrators in assigning teaching loads and extracurricular duties.

It was the purpose of this thesis to analyze the work-week of a sample of Central Alberta high school teachers. More particularly it was to examine: (1) the factors of subject field, teaching experience, years of training, sex of teacher, and size of high school in relationship to the median hourly work-week of teachers; (2) the main areas of complaint that teachers have concerning their teaching load; and (3) teachers' and principals' estimation of a suitable teaching load.

Suggestions by authors in this field of work were used to determine the various teaching duties composing the total teaching load. Information was obtained from principals and teachers by means of questionnaires. The median test was used to determine if significant differences existed between the time spent on the various duties by the groups.

The findings can be briefly summarized. Teachers in the Home Economics - Industrial Arts group spent significantly less time on total teaching duties than did all other teachers. There was no



significant difference between the time spent on total teaching duties by teachers (a) with varying years of teaching experience, (b) with varying years of training, (c) of either sex, and (d) from variously sized high schools, and all other teachers. A considerable portion of the teachers, 40.8 per cent, were dissatisfied with their existing teaching load. Teachers had a considerable number of specific and general complaints concerning their teaching load. Both principals and teachers recommended a reduction in the existing median weekly teaching load of 43.27 hours per week so that the total teaching load would be at or near forty hours per week. Other factors such as class size and the stress and strain of teaching various subjects or groups were not investigated nor was there a direct attempt made to determine the underlying reasons for the dissatisfaction expressed by some of the teachers.

An examination of the findings suggests that a reduction in total weekly teaching load is desirable. A reduction of the teaching load to near forty hours per week as recommended by principals and teachers could be achieved by reducing assigned classroom instruction time by about one and one-half hours per week. Extracurricular duties were found to be unevenly distributed among teachers and it appears to be desirable to have a more equitable distribution of extracurricular duties among teachers. The distribution of extracurricular duties among teachers must, however, take into consideration the total teaching load of teachers.





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## CHAPTER I

### THE PROBLEM

Varying opinions exist regarding the total time involved in performing the activities considered as part of teaching. Different opinions also exist regarding teacher attitude towards teaching load. Many claims have been made but few of these claims have been supported by factual evidence.

#### I. The Problem

Nature of the problem. A teacher's actual teaching time is normally limited to those hours during which classes are legally conducted. Beyond this minimum working time a teacher may engage in a number of tasks related to classroom work. These tasks, that are related to classroom work but which are not necessarily performed either in the classroom or during school hours, are considered as part of a teacher's duties. The extent to which a teacher carries on these additional tasks has an important bearing on the actual total work-week of a teacher. This total teaching load and teacher attitude towards this load is of importance to administrators.

Statement of the problem. The purpose of this study was to analyze the work-week of a group of Central Alberta high school teachers. More particularly it was to examine:

1. The effect of the following factors upon the median hourly



work-week of teachers.

- a) Subject field.
  - b) Teaching experience.
  - c) Years of training.
  - d) Sex of teacher.
  - e) Size of high school.
2. The main areas of complaint that teachers have concerning their teaching load.
  3. Teachers' and principals' estimation of a suitable teaching load.

Importance of the study. Teaching load is one of the factors in promoting or destroying morale.<sup>1</sup> Teachers who feel overloaded either in actual working time or in comparison to some other teacher will not take the same interest in their work as would normally be expected. Dr. John Amend in discussing how administrators can identify the interests, concern, and needs of a group in order that the group may do more effective work stated:

One of the most fruitful methods is to listen for evidences of dissatisfaction on the part of teachers. Their gripes over elements in the status quo, and their complaints are the most fruitful source of suggestions for areas for study and change.<sup>2</sup>

A knowledge of what teaching loads are and what is felt that they should be will be of value to administrators in assigning teaching loads and

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<sup>1</sup>Kimball Wiles, Supervision for Better Schools (New York: Prentice-Hall, Inc., 1950), p. 39.

<sup>2</sup>John Amend, Lecture delivered to the Leadership Course for School Principals, Edmonton, Alberta, July 9, 1958.



extracurricular activities. This should promote morale and cause the school to operate at a higher plane both for efficiency and results. The knowledge of teaching loads and some of the complaints concerning them will help the administrator to set up a sound and defensible administrative policy which is part of an administrator's duties.<sup>3</sup>

## II. Delimitation of the Problem

Very little research has been done in Alberta on the teaching load of teachers. A few small investigations have been conducted but these have been on limited samples and the results were not widely circulated. Since this area of administration is largely unexplored, the difficulty was in selecting a reasonably sized and manageable whole which was fairly independent of the rest of the area and yet small enough to receive adequate treatment in one study. The results obtained from a study of this type must be held tentatively and be subject to revision as further studies provide more information.

## III. Definitions of Terms Used

Teacher. An individual holding a valid teaching certificate and who is employed to instruct students but who is not designated as a principal, assistant principal, vice-principal, or supervisor.

Administrator. A teacher who is designated as a principal,

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<sup>3</sup>A. S. Barr, W. H. Burton, and L. Brueckner, Supervision: Democratic Leadership in the Improvement of Learning (D. Appleton-Century Company, 1947), p. 601.





assistant principal, vice-principal, or supervisor.

Supervision. Non-instructional time required for the purpose of observing and controlling students during required school activities and normal school hours.

Extracurricular activities. Student activities sponsored by the school which are in addition to the normally required school activities.

Work-week. The total weekly time required to perform a number of varied tasks which are considered part of a teacher's normal duties.

Teacher load. Teacher load throughout the report of this investigation will be interpreted as the work-week of a teacher.

#### IV. Limitations

Schools. Only those schools were selected which:

- a) Offered standard instruction time to high school classes.
- b) Had a staff, including administrators, which did not exceed ten in number.

Personnel. Only those teachers were selected who:

- a) Devoted their major portion of classroom instruction time to high school classes. When Grade IX was in the high school departmentalization scheme, Grade IX classes were considered as high school classes.

Area. All Alberta high schools within the above mentioned limits and within the area labelled in Figure 1, with the exceptions of the Edmonton and Calgary high schools, were included in the study.







FIGURE 1

GEOGRAPHICAL AREA OF STUDY



## V. Overview of Thesis

Information required for the study was obtained by means of questionnaires sent to high school teachers and principals. Chapter I outlines the problem investigated. A review of American and Canadian literature related to this study is presented in Chapter II. Chapter III discusses the manner of collecting and organizing the data. Chapters IV to VIII examine the effect of the factors of subject field, teaching experience, training, sex, and size of the high school upon teacher load. The degree of teacher's satisfaction for the existing teaching load is presented in Chapter IX. A contrast between teachers' and principals' recommended teaching load and existing teaching load is presented in Chapter X. The summary and conclusions are contained in Chapter XI.

## VI. Basic Assumptions

For the purposes of this study it was assumed that the responses to the questionnaires were frank and truthful, presenting a true picture of the situation as it actually existed. A second assumption was that the various factors considered as influencing teaching load were independent of each other.



## CHAPTER II

### RELATED LITERATURE

#### United States Literature

##### Historical Development

Studies on teacher load have been popular in the United States. One of the first studies was in terms of hours per week and was conducted by Koos<sup>1</sup> in Minnesota in 1922. For the next number of years teaching load studies in terms of hours per week were quite common.

After the initial time studies of teaching load, a trend developed for "weighting" various subjects according to their relative teaching difficulty. One of the first suggested schemes for doing this was by Almack and Bursch<sup>2</sup> in 1925. Support for considering relative difficulty of various subjects as a factor in teaching load has continued through the years as indicated by Brown's article<sup>3</sup> in 1931, Garland's article<sup>4</sup> in

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<sup>1</sup>F. H. Koos, "A Study of the Teaching Load of 236 Minnesota High School Teachers," American School Board Journal, (August, 1922), as quoted by L. H. Clark in "Teaching. An Overworked Profession?", Clearing House, XXX (1955), p. 34.

<sup>2</sup>J. C. Almack and James F. Bursch, The Administration of Consolidated and Village Schools, (Boston: Houghton-Mifflin Co., 1925), p. 88.

<sup>3</sup>Edwin J. Brown, "Some Factors in Measuring the Teacher's Load," Educational Administration and Supervision, XVII (1931), p. 66.

<sup>4</sup>P. L. Garland, "The Extracurriculum and the Teacher's Load," Clearing House, XIX (October, 1944), p. 31.





1944, and Cole's article<sup>5</sup> in 1947. Douglass' revised formula<sup>6</sup> of 1954<sup>8</sup> takes into consideration the relative difficulty of the various subjects and grade levels.

The early time-studies of teacher load formed the basis for later development of formulas for the comparative analysis of teaching loads. This is emphasized by Newsom who states:<sup>7</sup>

A review on the literature on the problem reveals a mass of information dealing with the manner in which certain groups of teachers in many different localities spent their time. This information was obtained as the result of time studies and job analyses carried out locally by certain investigators. The data so obtained were valuable because they showed enough general agreement to warrant conclusions concerning the proportion of time that teachers spend on various activities both in and out of school and because they provided a basis on which other writers could and did develop methods for evaluating teacher load.

The Douglass formula of 1928<sup>8</sup> appears to be one of the first suggested. A number of other formulas have been proposed since that time. The time since the proposal of the first formula has largely been spent in refining existing formulas and in devising new formulas to take into consideration varying teaching conditions. The chief value of a formula is that it

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<sup>5</sup>T. R. Cole, "Measuring Teacher Load in Secondary School Subjects," American School Board Journal, CXV (December, 1947), p. 31.

<sup>6</sup>"Revised Formula," National Association Secondary School Principals, XVIII (1954), p. 97.

<sup>7</sup>N. W. Newsom, "Computing Teacher Load," School Review, XXXXVII (1939), p. 586.

<sup>8</sup>H. R. Douglass, "Measuring the Teaching Load in the High School," The Nation's Schools, II (October, 1928), p. 22.





reduces each teacher's total assignments to a single figure that can be compared with similar figures for other teachers.<sup>9</sup>

### Some Existing Formulas

The most frequently quoted formula in Educational Journals is the Douglass formula. This formula<sup>10</sup> takes into consideration the relative difficulty of various subjects at different grade levels, number of class periods per week, length of class periods, duplication of class material, number of pupils, and other extra duties. Norms, as established by 5643 teachers, giving median, upper and lower quartile scores can be compared to a teacher's score.

A simpler formula requiring less mathematical interpretation is Pettit's formula.<sup>11</sup> This formula takes into consideration the average number of pupils taught, number of classes taught, number of different class preparations, extracurricular duties, and experience. Ideal, recommended, and maximum "point" teaching loads are suggested.

Nelson,<sup>12</sup> however, comments on formulas to the effect that formulas have been suggested by various writers in the field of school

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<sup>9</sup>"Teaching Load in 1950," National Education Association Research Bulletin, XXIX (1951), p. 43.

<sup>10</sup>"Revised Formula," National Association Secondary School Principals, XVIII (1954), p. 97.

<sup>11</sup>M. L. Pettit, "Determining Teaching Loads," American School Board Journal, CXXVIII (March, 1954), p. 34.

<sup>12</sup>T. L. Nelson, "Teacher Load," American School Board Journal, III (July, 1945), p. 50.



administration, but that these formulas are seldom used.

### The Present Situation

The present situation is one of a stalemate. Teacher load is recognized as being, at least in part, an administrative problem. Suggestions have been made for relieving teacher load but because of factors beyond the control of administrators little is being done to relieve the existing teacher load.

Teacher load is recognized as being at least partly within administrative management. Davis, in her study,<sup>13</sup> found that one-third of the teachers who made suggestions for improving the teaching load made suggestions that dealt directly with phases of the administrative process. The N.E.A. study<sup>14</sup> found that 40 per cent of the teachers recommending improvements made recommendations that dealt with the administrative management of the schools. Robinson notes,<sup>15</sup> in discussing teacher load as a factor in teacher drop out, that the solution lies, at least in part, somewhere within the administrative management of the profession. Shellhammer<sup>16</sup> also states that administrative policies towards teacher

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<sup>13</sup>Hazel Davis, "What to Do About Teaching Load," Education Digest, XVII (December, 1951), p. 27.

<sup>14</sup>"Teaching Load in 1950," National Education Association Research Bulletin, XXIX (1951), p. 30.

<sup>15</sup>N. J. Robinson, "Lift the Teacher Load," National Education Association Journal, XXXVIII, (November, 1954), p. 509.

<sup>16</sup>Thomas A. Shellhammer, "Work Week of the Secondary School Teacher," California Journal of Secondary Education, XXXII (May, 1957), p. 305.



load cause some teacher drop outs and further that the enthusiastic and able teachers are overworked. Teacher load, then, is at least in part an administrative problem.

Various suggestions have been made in an attempt to alleviate excessive teaching load. The N.E.A. bulletin on teaching load<sup>17</sup> suggests that the individual schools seem to be the logical starting place for the effort to equalize and lighten teaching load. The same article<sup>18</sup> adds that good administrative management within a school will help to lighten the load for teachers. The N.E.A.<sup>19</sup> suggests that it is the principal's primary responsibility to make as fair a distribution as possible of the duties to be carried. This is also a suggestion made by Davis<sup>20</sup> in her article on teaching load. Clark<sup>21</sup> suggests a reduction in the extra-curricular work. Equitable distribution of teaching duties and limiting the extent of the extracurricular program are areas over which the principals have a certain amount of control.

Some suggestions for reducing teacher load are mostly beyond a

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<sup>17</sup>"Teaching Load in 1950," National Education Association Research Bulletin, XXIX (1951), p. 30.

<sup>18</sup>Ibid., p. 41.

<sup>19</sup>Ibid., p. 43

<sup>20</sup>Hazel Davis, "What to Do About Teaching Load," Education Digest, XVII (December, 1951), p. 27.

<sup>21</sup>Leonard H. Clark, "Teaching. An Overworked Profession?" Clearing House, XXX (January, 1955), p. 35.





principal's control but are within the control of elected officials for larger units of school administration. These suggestions include:

1. Relieve the teacher of routine tasks. Routine tasks account for 23 per cent of some teacher's time.<sup>22</sup> These tasks include certain disciplinary responsibilities, such as supervising study halls and lunchrooms, clerical work, and collection of money. Sub-professional personnel can assume responsibilities of this kind of work.<sup>23</sup>
2. Teacher teams composed of master-teachers and professional assistants might make it possible for the same number of teachers to handle a greater number of students and even improve the quality of instruction.<sup>24</sup>
3. Reasonable class size.<sup>25</sup>
4. Simplifying and streamlining the school program to reduce the services rendered to children so that there is less work to do.<sup>26</sup>
5. Employ more teachers.<sup>27</sup>

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<sup>22</sup>Paul E. Christensen, "Work-Sampling: A Stroboscopic View of Teaching," Educational Administration and Supervision, XXXXII (April, 1956), p. 242.

<sup>23</sup>M. L. Hartung, "Better Utilization of the Teacher's Time," School Review, LXI (1953), p. 514.

<sup>24</sup>Ibid., p. 514.

<sup>25</sup>"Teaching Load in 1950," National Education Association Research Bulletin, XXIX (1951), p. 4.

<sup>26</sup>Ibid., p. 40.

<sup>27</sup>Ibid., p. 40.





The N.E.A., in a later article, suggests some reasons why the information available on this administrative problem is not applied extensively. The reasons suggested as complicating the situation on teacher load are:<sup>28</sup>

1. Postwar complications of World War I.
2. Economic depression of the 1930's.
3. World War II.
4. High birth rate of the 1940's and 1950's.
5. Schools are attempting to use more technical knowledge to reach more complex educational goals on more children with relatively fewer teachers, fewer classrooms, and fewer facilities.

The nature of the articles on teaching load appearing in the various United States Educational Journals indicates that there is an administrative problem, in regards to teaching load, existing in the United States. Suggestions have been made as how to solve or at least alleviate this problem. It appears, however, because of certain conditions beyond the control of administrators, very little is being done about the problem of relieving teacher load.

#### Canadian Literature

Very little Canadian literature is available on teacher load. No formal studies on teacher load have been conducted at the University of

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<sup>28</sup>"N.E.A. and Teacher Welfare: Teacher Load," National Education Association Journal, XXXV (January, 1956), p. 96.



Alberta. An examination of the Canadian Index to Periodicals and Documentary Films<sup>29</sup> reveals no articles on teacher load. A few informal sueveys, such as the survey conducted by the Edmonton High School Local of the A.T.A. on curricular, extracurricular, and professional activities of Edmonton high school teachers<sup>30</sup> have been made but these were for limited samples and the results were not widely circulated. The available Canadian literature can be divided into opinions expressed by individuals and a small amount of factual material.

The opinions come primarily from articles printed in Canadian magazines. Katz, in a Maclean's article states:<sup>31</sup>

But even as he rhapsodizes, no teacher is likely to forget that the roses are liberally sprinkled with thorns. Besides the pay, there is the matter of long working hours. ... A survey of Toronto high school staffs revealed that they worked up to sixty hours. ... Student extracurricular activities - lunch hour meetings, evening socials and athletics - have added to the burden.

Hutton in a later article in Maclean's on analyzing sixteen careers rated only one as having "excellent" working conditions and that was teaching.<sup>32</sup> He states: "Teachers get longer vacations than other

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<sup>29</sup>Canadian Library Association, Canadian Index to Periodicals and Documentary Films, Mrs. E. P. Cockshutt, Editor. Ottawa.

<sup>30</sup>Committee to Study Administrative Problems of Composite High Schools, "A Survey of the Teacher Load in Curricular, Extracurricular, and Professional Activities of the Edmonton Public High Schools for the Year 1956-57." Edmonton Public High School Local of the Alberta Teachers' Association, Edmonton, 1957.

<sup>31</sup>Sidney Katz, "The Crisis in Education. Part I, The Teachers," Maclean's, LXVI (March, 1953), Montreal, p. 55.

<sup>32</sup>Eric Hutton, "Careers in Canada - What they Cost and What They Pay," Maclean's, LXX (January, 1957), Montreal, p. 10.



workers - two months in summer and a week at Christmas and Easter."<sup>33</sup>

The Edmonton Study<sup>34</sup> provides some factual information on the topic of teacher load. In this study 129 high school teachers completed usable returns. These teachers were divided into eight groups based upon the subject field in which they taught. Their average hourly work-week varied from 41.4 hours for teachers of Art, Drama, and Music to 54.3 hours for teachers of Literature, Language, and Social Studies.<sup>35</sup> Murray, in his thesis which investigated reasons why teachers left the teaching profession, found that of the teachers who left teaching the single female teacher averaged 49.25 hours per week,<sup>36</sup> the single male teacher averaged 46 hours per week,<sup>37</sup> and the married male teacher averaged nearly 50 hours per week for teaching duties.<sup>38</sup> Tyler, in his thesis states:<sup>39</sup>

Besides the regular work in the classroom the teacher must also spend some time preparing next day's lessons, marking exercises, preparing and marking tests and examinations, giving extra help to those pupils in need of it, as well as carrying on such extra-curricular activities as sports, dramatics, glee clubs and various other organizations which are in charge of the teacher.

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<sup>33</sup>Ibid., p. 10.

<sup>34</sup>Op. cit.

<sup>35</sup>Ibid., p. 14.

<sup>36</sup>Thomas H. Murray, "An Investigation of the Reasons Why Teachers Leave Teaching," Unpublished Master's Thesis, University of Alberta, 1955, p. 29.

<sup>37</sup>Ibid., p. 60.

<sup>38</sup>Ibid., p. 105.

<sup>39</sup>F. T. Tyler, "A Study of Certain Selected Alberta Occupations," Unpublished Bachelor's Thesis, University of Alberta, 1938, p. 165.





This gives some indication of the varied and time consuming tasks expected of teachers.

Canadian literature expresses both favorable and unfavorable opinions towards the working conditions of teachers. In general the available literature has more unfavorable than favorable opinions regarding the working conditions of teachers.





## CHAPTER III

### PROCEDURE

#### Data Collection

Instrument. The questions in the questionnaire had three general purposes. (1) Questions to provide information to be used as a basis for dividing the sample into various groups according to the factors that may affect teaching load. (2) Questions to ascertain the teaching load. (3) Questions to determine attitude towards existing teaching load. Individual questions were designed to provide the necessary information for each general area.

Questions used as a basis for dividing the sample into various groups were relatively easily arranged and justified. The sample had to be divided according to the factors that were considered to affect the hourly work-week of teachers. The questions were, therefore, selected so as to divide the sample into various groups according to the factors as stated in the problem.

The performance of a number of varied tasks constitutes the hourly work-week of a teacher. These tasks may or may not be performed during school hours necessitating the justification of each task as part of the normal teaching load. Selecting these tasks, as suggested by the various authors in this field of work, was accepted as the criteria for ascertaining the hourly work-week of teachers.

All literature available on the topic of teaching load considers



assigned classroom instruction time as the basic part of the total load. Various tasks arise that are associated with classroom instruction and the extent to which these are performed has an important bearing on the total teaching load. Closely associated with classroom instruction time is the preparation of lessons and materials and the marking of examinations and assignments. These tasks are considered as a normal activity of teaching by the Edmonton Study,<sup>1</sup> by Tyler,<sup>2</sup> and by Nelson.<sup>3</sup> Supervision of students during periods when they are not taking classes, before school, after school, at noon, and recesses is a frequent activity of teachers in order to maintain effective study and discipline. The inclusion of supervision as a teacher duty is suggested by Hartung,<sup>4</sup> and the Edmonton Study.<sup>5</sup> Clerical tasks are considered as part of a teacher's duties by Hartung,<sup>6</sup> Tyler,<sup>7</sup> and the Edmonton Study.<sup>8</sup> Nearly all of the

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<sup>1</sup>Committee to Study Administrative Problems of Composite High Schools, "A Survey of the Teacher Load in Curricular, Extracurricular, and Professional Activities of the Edmonton Public High Schools for the Year 1956-57." Edmonton Public High School Local of the Alberta Teachers' Association, Edmonton, 1937, p. 14.

<sup>2</sup>F. T. Tyler, "A Survey of Certain Selected Alberta Occupations." Unpublished Bachelor's Thesis, University of Alberta, 1938, p. 165.

<sup>3</sup>T. L. Nelson, "Teacher Load," American School Board Journal, III (July, 1945), p. 50.

<sup>4</sup>M. L. Hartung, "Better Utilization of the Teacher's Time," School Review, LXI (1953), p. 514.

<sup>5</sup>Op. cit., p. 14.

<sup>6</sup>Op. cit., p. 514.

<sup>7</sup>Op. cit., p. 165.

<sup>8</sup>Op. cit., P. 14.



writers on teacher load list extracurricular activities as part of the  
teaching load. Garland,<sup>9</sup> Baker,<sup>10</sup> Tyler,<sup>11</sup> Katz,<sup>12</sup> Murray,<sup>13</sup> Robinson,<sup>14</sup>  
Nelson,<sup>15</sup> and the Edmonton Study<sup>16</sup> include extracurricular as part of a  
teacher's load. Katz,<sup>17</sup> Robinson,<sup>18</sup> and the Edmonton Study<sup>19</sup> consider  
staff meetings as part of the educational program of the school and  
therefore as part of the work-week of teachers. Activities, such as  
participating in Home and School Associations, which are related to the  
school program but not necessarily a part of it, are considered as part

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<sup>9</sup>P. L. Garlund, "The Extracurriculum and the Teacher's Load,"  
Clearing House, XIX (October, 1944), p. 82.

<sup>10</sup>T. D. Baker, "A Study of Social and Economic Status of Teachers  
as Related to Conditions of Teacher Shortage, Qualifications, and  
Stability in Canada," Unpublished Master's Thesis, University of Alberta,  
1948, p. 98.

<sup>11</sup>Op. cit., p. 165.

<sup>12</sup>Sidney Katz, "The Crisis in Education. Part I, the Teachers,"  
Maclean's, LXVI (March, 1953), Montreal, p. 55.

<sup>13</sup>Thomas H. Murray, "An Investigation of the Reasons Why Teachers  
Leave Teaching," Unpublished Master's Thesis, University of Alberta,  
1955, p. 11.

<sup>14</sup>N. J. Robinson, "Lift the Teacher Load," National Education  
Association Journal, XXXXIII (November, 1954) p. 509.

<sup>15</sup>Op. cit., p. 50.

<sup>16</sup>Op. cit., p. 14.

<sup>17</sup>Op. cit., p. 50.

<sup>18</sup>Op. cit., p. 509.

<sup>19</sup>Op. cit., p. 14.





of the teaching load by Tyler<sup>20</sup> and Robinson.<sup>21</sup> The various parts of<sup>20</sup> the questionnaire used to determine the hourly work-week of teachers was based upon the suggested tasks as outlined by the above authors.

The section of questions to determine teacher attitude towards the present load was divided into three main parts. First to determine whether the teacher was satisfied with the present conditions, secondly, if the teacher was dissatisfied, to determine the teacher's idea of a suitable load, and thirdly to permit the teacher to release any other viewpoints she had concerning the teaching load. These questions were closely related to those used in determining the teaching load in order to make comparisons and contrasts.

The various questions were then organized in such a manner so as to follow a logical sequence. The first questions were those that the respondent would expect and were such as to set the mood for the rest of the questionnaire. The questions in the central portion of the questionnaire were to obtain the main information desired in as brief a manner as possible. The final question was one permitting the respondent to release any feelings or emotions developed by the questionnaire or to include any other information that the respondent felt was of some importance.

The questions used to determine the principals' estimation of a suitable teaching load were essentially the questions used on the teachers' questionnaire to determine their existing and their recommended

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<sup>20</sup>Op. cit., p. 165.

<sup>21</sup>Op. cit., p. 509.





load. This close relationship between questionnaires facilitated the drawing of comparisons. Since the questions on the principals' questionnaire were so closely related to the questions on the teachers' questionnaire, the inclusion of the various items was justified on the same basis as the items on the questionnaire for teachers.

A trial run of the questionnaire, to check its validity, was conducted late in September in the Lacombe School Division No. 56. The junior high school teachers were used as the sample to check the validity of the questionnaire. A questionnaire was sent to every junior high school teacher within the Lacombe School Division No. 56, with a request that each teacher consider the questionnaire, reply to the questions, and suggest any changes in wording and/or additional items deemed necessary. One hundred per cent returns were obtained on this trial run of the questionnaire. In consideration of the replies to the questions and the comments of several teachers, two changes were made in the wording of the questions and one additional item was included.

Sample. Late in September superintendents, within the area of the study, were contacted. Permission was requested to conduct the study within their area. If permission was granted a request was included for the names and addresses of the principals of standard instruction time schools and the number of high school teachers in each school. All superintendents contacted granted permission to conduct the study within their area and all of the superintendents provided the necessary information about the standard instruction time high schools within their area.



In December a letter was sent to the principal of each school to be included in the study. A request was made for co-operation in the study but included in the letter was the condition that if the principal and/or staff did not wish to take part in the study they could be dropped from the sample. Only one principal requested not to be included in the study.

The questionnaires for the teachers and principals were sent late in January. Late January was chosen to avoid the peak work periods of Christmas and Easter examination times. It was hoped that by avoiding these peak work periods the results would be more indicative of the normal working conditions for teachers. A number of follow-up devices were used to obtain returns. These included form letter reminders, personal letter reminders, interviews, and the reissuance of questionnaires to principals and teachers.

Two weeks after receiving replies from principals and/or teachers a reliability check was conducted on the teacher returns. This reliability check was in two parts. All principals replying were requested to complete a form on one of their high school teachers and a ten per cent random sample of teachers, according to Fisher's Table of random numbers,<sup>23</sup> were requested to complete a second copy of the questionnaire.

Seventy-six principals were within the limits of the study. Seventy of these returned their completed questionnaire for a return of 92.1 per cent.

Two hundred and thirty-six high school teachers were within the

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<sup>23</sup>R. A. Fisher and F. Yates, Statistical Tables. (New York: Hafner Publishing Company, 1948).



limits of the study. Two hundred and seven returned completed questionnaires for a return of 87.7 per cent. One of the questionnaires was not usable.

The reliability check through principals agreed to within 93 per cent of the totals as given by the teachers involved in the check. The reliability check through the teachers agreed to within 98 per cent of the results as given by these teachers on their first return.

### Data Analysis

Median Test. The sample was divided into various groups according to the factors that were considered as having a possible effect on teaching load. The median test was used to analyze the data between various groups. The median test is a procedure for testing whether two independent groups differ in central tendencies. More precisely, the median test will give information as to whether it is likely that two independent groups (not necessarily of the same size) have been drawn from populations with the same median.<sup>24</sup> The null hypothesis is that the two groups are from populations with the same median; the alternative hypothesis may be that the median of one population is higher than that of the other. Since a 2X2 table was used for the various groups being analyzed only one degree of freedom was possible. The probability of a deviation greater than the  $\chi^2$  calculated was determined from statistical

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<sup>24</sup>Sidney Siegel, Nonparametric Statistics, (McGraw-Hill Book Company, Inc. New York, 1956), p. 111.





tables.

Level of Significance. The .05 and the .01 level of significance were used for the various analyses made in this study.

#### General

There were no outstanding difficulties encountered in conducting the questionnaire study. A number of teachers and principals expressed interest in the study while at the other extreme a few principals and teachers were quite un-cooperative.

Principals had some difficulty in estimating the hours of time spent on various tasks by high school teachers on their staff. The principals were free to make their own choice as to which high school staff member on whom they would complete a reply. The principals were instructed to place a question mark in the blank if they did not know or if they were uncertain as to the time spent by the teacher on various tasks. The number of question marks and comments would seem to indicate that the principals were rather uncertain as to the amount of time their teachers spend on tasks that are not performed at the school.





## CHAPTER IV

### SUBJECT FIELD AS A FACTOR IN TEACHING LOAD

One of the usual methods of grouping teachers is according to the subject field in which they are teaching. If subjects vary in the relative degree of difficulty of being taught, as suggested by Douglass in his formula,<sup>1</sup> then subject field may be a factor in influencing total teaching load. In this chapter the teachers were divided into various groups according to the subject field in which they were teaching. Each teacher was placed in one of the following groups:

1. Mathematics - Science.
2. Social Studies - English - Literature.
3. Foreign Languages.
4. Business Education.
5. Home Economics - Industrial Arts.
6. Off Pattern.
7. Others.

To be placed into groups one to five inclusive, the subject field in which the teacher spent one-half or more of his classroom instruction time had to be in his major and/or minor field of training. Group six consisted of those who spent one-half or more of their classroom instruction time in a subject field which was neither in their major nor minor field of training. Group seven consisted of those in the field of

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<sup>1</sup>"Revised Formula," National Association Secondary School Principals, XVIII (1954), p. 97.



Fine Arts and Physical Education, those who were trained along the elementary route, and those who had completed no courses in a major nor minor field of study.

Table I presents the number of teachers in each subject field. The groups in order of size are: Social Studies - English - Literature (66), Mathematics - Science (43), Off Pattern (32), Home Economics - Industrial Arts (23), Others (21), Foreign Languages (11), and Business Education (7). The total number of high school teachers involved in this grouping is 203.

All of the Tables that follow Table I in this chapter are based upon the subject field divisions and totals as shown in Table I. The times given in the Tables in this chapter are in hours and are for a period of one week.

TABLE I

THE SUBJECT FIELD FOR A SAMPLE OF 203  
ALBERTA HIGH SCHOOL TEACHERS

Subject Field	Number
Math. - Science	43
Soc.St. - Eng. - Lit.	66
Foreign Languages	11
Business Education	7
Home Ec.- Ind. Arts	23
Off Pattern	32
Others	21
Total	203



The assigned classroom instruction time in the various subject fields, as reported by teachers, is presented in Table II. All groups show that individuals within the group vary considerably in assigned classroom instruction time. The minimums vary from 13.33 hours for two individuals from the Home Economics - Industrial Arts and Other groups to 16.50 hours for an individual from the Mathematics - Science group. Maximums for groups are either at or very near to 27.50 hours per week. The medians for the various groups vary from a low of 20.92 hours for the Off Pattern group to a high of 23.33 hours for the Business Education group. The four groups - Business Education, Home Economics - Industrial Arts, Others, and Foreign Languages - whose individual medians are above the median for the entire group are generally those groups which offer specialized courses in high school. There is, however, a difference of only 2.41 hours between the medians for the two extreme groups. The median test for two independent groups revealed that there was no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Some groups spent a numerically greater but not significantly different amount of time on classroom instruction.



TABLE II

SUBJECT FIELD AND ASSIGNED CLASSROOM  
INSTRUCTION TIME

Subject Field	Classroom Instruction		Significance*
	Range	Median	
Math. - Science	16.50 to 27.50	21.50	nil
Soc. St. - Eng. - Lit.	13.45 to 26.00	21.30	nil
Foreign Languages	14.58 to 27.50	23.00	nil
Business Education	15.00 to 27.50	23.33	nil
Home Ec. - Ind. Arts	13.33 to 26.67	22.25	nil
Off Pattern	15.75 to 27.50	20.92	nil
Others	13.33 to 27.00	21.66	nil
Total Group	13.33 to 27.50	21.63	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





Supervision time for teachers in various subject fields, as reported by teachers, is presented in Table III. A considerable range in supervision time is evident in all groups. The range is from 0.00 hours supervision time to 12.80 hours spent in supervision. All groups, with the exception of the Others group, have some individuals who do no supervision, while the maximums for groups range from a low of 2.33 hours for the Business Education group to 12.80 hours for the Social Studies - English - Literature group. The lowest median time, 0.50 hours, was recorded by the Home Economics - Industrial Arts group while the highest median time, 3.25 hours, came from the Others group. Three groups are above and four groups are below 2.48 hours, the median for all groups. The median test for two independent groups revealed a significant difference, at the .01 level, in supervision time for the Home Economics - Industrial Arts group and a significant difference, at the .05 level, in supervision time for the Business Education group as compared to all other groups. The Home Economics - Industrial Arts and Business Education groups spent significantly less time on supervision as compared to the remaining groups.



TABLE III  
SUBJECT FIELD AND TIME SPENT ON SUPERVISION

Subject Field	Supervision Time		Significance*
	Range	Median	
Math. - Science	0.00 to 8.67	2.75	nil
Soc. St. - Eng. - Lit.	0.00 to 12.80	2.58	nil
Foreign Languages	0.00 to 5.00	2.00	nil
Business Education	0.00 to 2.33	1.50	.05
Home Ec. - Ind. Arts	0.00 to 7.00	0.50	.01
Off Pattern	0.00 to 7.00	2.25	nil
Others	0.58 to 12.25	3.25	nil
Total Group	0.00 to 12.80	2.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time spent on the preparation of lessons and materials for the groups in various subject fields, as reported by teachers, is presented in Table IV. Since some teachers have no particular training in the subject field in which they are teaching it might be assumed that they would require a relatively greater amount of time to prepare adequately for their teaching duties. This assumption is examined in Table IV. The range in time taken by individuals to prepare lessons and materials varies from 0.00 to 20.00 hours per week. All groups show considerable variation among individuals within the group. The medians for the various groups are more uniform varying from a low of 6.00 hours for the Business Education, Home Economics - Industrial Arts, and Others group to a high of 8.00 hours for the Off Pattern and Mathematics - Science groups. There is a difference of 2.00 hours between the medians of the two extreme groups. The median for all groups is 7.48 hours. The median test revealed that there was no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Some groups spent a numerically greater but not significantly different amount of time on the preparation of lessons and materials required in their teaching duties.





TABLE IV

SUBJECT FIELD AND TIME SPENT ON PREPARATION  
OF LESSONS AND MATERIALS

Subject Field	Preparation Time		Significance*
	Range	Median	
Mathematics - Science	2.00 to 20.00	8.00	nil
Soc. St. - Eng. - Lit	1.00 to 20.00	7.50	nil
Foreign Languages	2.00 to 10.00	6.25	nil
Business Education	3.00 to 12.00	6.00	nil
Home Ec. - Ind. Arts	2.50 to 15.00	6.00	nil
Off Pattern	1.00 to 20.00	8.00	nil
Others	0.00 to 15.00	6.00	nil
Total Group	0.00 to 20.00	7.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time required by teachers in various subject fields to mark examinations and assignments is presented in Table V. This aspect of teaching load is of particular interest to many teachers. Teachers in the Social Studies - English - Literature group frequently claim that the nature of the courses that they teach makes it necessary to assign a relatively larger number of essays which greatly increases marking time. Assumptions of this type are examined in Table V. Considerable variation among individuals exists. Individuals within a group vary from 10.00 hours for the Foreign Language group to 20.00 hours for the Mathematics - Science and Social Studies - English - Literature groups. The medians vary from a low of 4.48 hours for the Home Economics - Industrial Arts group to 7.50 hours for the Business Education group. The median test revealed a significant difference, at the .05 level, between the time spent by the Social Studies - English - Literature and Home Economics - Industrial Arts groups as compared to all other groups. Teachers in the Social Studies - English - Literature group spent significantly more time while teachers in the Home Economics - Industrial Arts group spent significantly less time in marking examinations and assignments as compared to the remaining groups.



TABLE V

SUBJECT FIELD AND TIME SPENT ON MARKING  
EXAMINATIONS AND ASSIGNMENTS

Subject Field	Marking Time		Significance*
	Range	Median	
Mathematics - Science	0.00 to 20.00	5.50	nil
Soc. St. - Eng. - Lit.	0.00 to 20.00	7.00	.05
Foreign Languages	2.00 to 12.00	7.00	nil
Business Education	4.00 to 15.00	7.50	nil
Home Ec. - Ind. Arts	0.00 to 10.67	4.48	.05
Off Pattern	3.00 to 15.00	5.50	nil
Others	0.00 to 20.00	5.00	nil
Total Group	0.00 to 20.00	5.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time spent by teachers in various subject fields on extra-curricular activities is presented in Table VI. Considerable variation exists among individuals as to the amount of extracurricular work done. All groups have individuals who do no extracurricular work while the maximums range from 3.50 hours for the Foreign Language group to 15.00 hours for the Social Studies - English - Literature group. The medians for the various groups also show some variation. The low median is 0.50 hours and is for the Business Education group while the high median is triple this at 1.50 hours and is for the Social Studies - English - Literature group. The median for all groups is 1.00 hour per week. An interesting point to note is that 34.9 per cent of the teachers do no extracurricular work whatsoever. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Although there is variation in the time spent on extracurricular activities there is no statistical relationship between subject field and time spent on extracurricular activities.





TABLE VI  
SUBJECT FIELD AND TIME SPENT ON  
EXTRACURRICULAR ACTIVITIES

Subject Field	Extracurricular Time		Significance*
	Range	Median	
Mathematics - Science	0.00 to 12.00	1.00	nil
Soc. St. - Eng. - Lit.	0.00 to 15.00	1.50	nil
Foreign Languages	0.00 to 3.50	1.00	nil
Business Education	0.00 to 10.00	0.50	nil
Home Ec. - Ind. Arts	0.00 to 8.00	1.00	nil
Off Pattern	0.00 to 6.00	1.00	nil
Others	0.00 to 10.00	1.00	nil
Total Group	0.00 to 15.00	1.00	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The total teaching load for the various subject field groups is presented in Table VII. The range among individuals for total teaching load is considerable, usually ranging from near thirty hours for the minimum to near sixty hours for the maximum of each group. The Foreign Language group is the only exception, having the high individual maximum at 46.42 hours. The medians for the various groups also show considerable variation, being from a low of 40.00 hours for the Home Economics - Industrial Arts group to 44.83 hours for the Social Studies - English - Literature group. The median for all groups is 43.27 hours per week with three groups having individual medians greater than this and four groups having medians lower than this total group median. The Home Economics - Industrial Arts group has the greatest deviation, at 3.27 hours, from the median for the entire sample. The median test revealed that the Home Economics - Industrial Arts group has a significant difference, at the .05 level, as compared to all other groups for total teaching load. Subject field appears to be an influencing factor, though very weak, on total teaching load.



TABLE VII

SUBJECT FIELD AND TOTAL TIME SPENT ON  
VARIOUS TEACHING ACTIVITIES\*

Subject Field	Total Teaching Time		Significance**
	Range	Median	
Mathematics - Science	30.08 to 59.50	43.50	nil
Soc. St. - Eng. - Lit.	27.33 to 68.00	44.83	nil
Foreign Languages	31.25 to 46.42	43.00	nil
Business Education	26.00 to 59.50	44.75	nil
Home Ec. - Ind. Arts	28.67 to 60.00	40.00	.05
Off Pattern	30.42 to 58.85	43.00	nil
Others	26.50 to 58.58	42.50	nil
Total Group	26.00 to 68.00	43.27	

\*Note: The "various teaching activities" are those outlined in Chapter II as being part of a teacher's normal duties.

\*\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





## Summary

A summary of significant differences between the time spent on various teaching activities by teachers of certain subjects and all other teachers is presented in Table VIII. There is no significant difference between the time spent by teachers of any of the seven groups and all other teachers on (a) classroom instruction, (b) preparation of lessons and materials, and (c) extracurricular activities. For supervision time there is a significant difference between the time spent on this activity by (a) teachers in the Business Education group and all other teachers, and (b) teachers in the Home Economics - Industrial Arts group and all other teachers. Both teachers in the Home Economics - Industrial Arts group and Business Education group spend significantly less time on supervision than did other teachers. In marking there is a significant difference between the time spent on this activity by (a) the teachers in the Social Studies - English - Literature group and all other teachers, and (b) the teachers in the Home Economics - Industrial Arts group and all other teachers. Teachers in the Social Studies - English - Literature group spend significantly more time while the teachers in the Home Economics - Industrial Arts group spend significantly less time on marking than do teachers of all other groups. A significant difference exists between the time spent on total teaching duties by the teachers in the Home Economics - Industrial Arts group as compared to all other



teachers. Teachers in the Home Economics - Industrial Arts group spend significantly less time on total teaching duties as compared to all other teachers. Subject field is an influencing factor, though very weak, on total teaching load.



TABLE VIII

SIGNIFICANT DIFFERENCES\* BETWEEN TIME SPENT ON VARIOUS  
TEACHING ACTIVITIES BY TEACHERS OF CERTAIN  
SUBJECTS AND ALL OTHER TEACHERS

Subject Field	Teaching Activity					Total Time
	Classroom Instruction	Supervision	Preparation	Marking	Extracurricular Activities	
Math. - Science	nil	nil	nil	nil	nil	nil
Soc. St. - Eng. - Lit.	nil	nil	nil	.05	nil	nil
Foreign Languages	nil	nil	nil	nil	nil	nil
Business Education	nil	.05	nil	nil	nil	nil
Home Ec. - Ind. Arts	nil	.01	nil	.05	nil	.05
Off Pattern	nil	nil	nil	nil	nil	nil
Others	nil	nil	nil	nil	nil	nil

\*Note: The information for significant differences for this Table  
is based on data from Tables II to VII.



## CHAPTER V

### TEACHING EXPERIENCE AS A FACTOR IN TEACHING LOAD

One of the factors that is sometimes considered to affect the work-week of a teacher is teaching experience. The assumption is that teachers with none or little teaching experience are not as familiar with the courses, classroom techniques, and methods of organizing the work and must, then, of necessity spend more time on the same task than an experienced teacher. Pettit<sup>1</sup> includes teaching experience as a factor in calculating teaching load according to his formula but Douglass<sup>2</sup> does not include teaching experience as a factor in calculating teaching load according to his formula.

In this chapter the effect of the factor of teaching experience on teacher work-week is investigated.

The number of teachers in each group for all Tables in this chapter is according to Table IX. The times given are in hours and are for a period of one week.

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<sup>1</sup>M. L. Pettit, "Determining Teaching Loads," American School Board Journal, Vol. CXXVIII (March, 1954), p. 34.

<sup>2</sup>Harl R. Douglass, "Light Loads or Heavy Loads for Your High School Teachers," American School Board Journal, Vol. CXXVIII (June, 1954), p. 32.





TABLE IX

YEARS OF TEACHING EXPERIENCE FOR A SAMPLE OF  
205 ALBERTA HIGH SCHOOL TEACHERS

Years of Experience	Number
0	13
1 or 2	15
3 to 5	15
6 to 10	57
11 to 20	62
21 or more	43
Total	205

Spears<sup>3</sup> suggests that if at all possible the load of a beginning teacher should be lightened. This extra time can then be used by the inexperienced teacher in planning and observing the good work of other teachers. The assigned classroom instruction time for teachers of varying years of teaching experience is presented in Table X. The range in assigned classroom instruction time is considerable, being from a low of 13.33 hours for individuals from the groups having 6 to

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<sup>3</sup>Harold Spears, Improving the Supervision of Instruction, (Eaglewood Cliffs, N.J.: Prentice-Hall, Inc., 1953), p. 197.



10 and 21 or more years of teaching experience to a high of 27.50 hours for an individual from the 11 to 20 years teaching experience group. Teachers with 0 years teaching experience have the least variation in range of assigned classroom instruction time while teachers with 11 to 20 years teaching experience exhibit the greatest range in assigned classroom instruction time. Teachers with 0 years teaching experience have the highest median assigned classroom instruction time at 22.17 hours. The lowest median classroom instruction time, at 21 hours, is for the group with 3 to 5 years teaching experience. The median test for two independent groups revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. No statistical relationship exists between teaching experience and assigned classroom instruction time.



TABLE X  
TEACHING EXPERIENCE AND ASSIGNED CLASSROOM  
INSTRUCTION TIME

Years of Experience	Classroom Instruction		Significance*
	Range	Median	
0	18.00 to 25.00	22.17	nil
1 or 2	15.75 to 25.00	22.00	nil
3 to 5	15.00 to 24.50	21.00	nil
6 to 10	13.33 to 25.67	21.50	nil
11 to 20	14.00 to 27.50	21.60	nil
21 or more	13.33 to 26.67	21.67	nil
Total Group	13.33 to 27.50	21.63	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





The time spent by teachers with different years of teaching experience on the preparation of lessons and materials is presented in Table XI. All groups show considerable variation in the range of time required to prepare lessons and materials for classroom use. The minimums vary from 0.00 hours for an individual from the group with 3 to 5 years teaching experience to 5.00 hours for an individual from the group with 1 or 2 years teaching experience. The maximums vary from 12.83 hours for an individual with 21 or more years teaching experience to 20.00 hours for individuals from the groups that have 0 years, 6 to 10 years, and 11 to 20 years teaching experience. The highest median time required, at 12.00 hours, is for the group with 0 years teaching experience, while the lowest median time, at 5.50 hours, is for the group with 21 or more years of teaching experience. The median test revealed a significant difference, at the .05 level, between the time spent on the preparation of lessons and materials by the group with 0 years teaching experience as compared to all other groups and also between the time spent by the group with 21 or more years teaching experience as compared to all other groups. Teachers with 0 years teaching experience spent significantly more time in the preparation of lessons and materials while teachers with 21 or more years teaching experience spent significantly less time on the preparation of lessons and materials as compared to all remaining groups.



TABLE XI

TEACHING EXPERIENCE AND TIME SPENT ON  
PREPARATION OF LESSONS AND MATERIALS

Years of Experience	Preparation Time		Significance*
	Range	Median	
0	4.00 to 20.00	12.00	.05
1 or 2	5.00 to 15.00	8.00	nil
3 to 5	0.00 to 15.00	6.00	nil
6 to 10	2.00 to 20.00	6.50	nil
11 to 20	1.00 to 20.00	8.00	nil
21 or more	1.00 to 12.83	5.50	.05
Total Group	0.00 to 20.00	7.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time, as reported by teachers, spent on the marking of examinations and assignments for the groups with different years of teaching experience is presented in Table XII. As in the previous tables all groups exhibit considerable variation in the range of marking time. All groups with more than 2 years teaching experience have individuals reporting spending no time in marking examinations and assignments. The minimum time spent in marking by the group with 0 years teaching experience was 2.00 hours while the group with 1 or 2 years teaching experience had a low individual time of 1.00 hour. Maximums ranged from 10.00 hours for the group with 0 years teaching experience to 20.00 hours for the group with 11 to 20 years teaching experience. The medians for groups were very close with a maximum difference of only 0.50 hours as a result of all medians being from 5.00 to 5.50 hours. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Teaching experience is not a factor in the time required to mark examinations and assignments.



TABLE XII

TEACHING EXPERIENCE AND TIME SPENT ON  
MARKING EXAMINATIONS AND ASSIGNMENTS

Years of Experience	Marking Time		Significance*
	Range	Median	
0	2.00 to 10.00	5.00	nil
1 or 2	1.00 to 12.00	5.00	nil
3 to 5	0.00 to 12.00	5.00	nil
6 to 10	0.00 to 15.00	5.25	nil
11 to 20	0.00 to 20.00	5.50	nil
21 or more	0.00 to 15.00	5.25	nil
Total Group	0.00 to 20.00	5.33	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





The time spent by teachers with different years of teaching experience on extracurricular activities is presented in Table XIII. The range for individuals within various groups varies considerably. All groups have individuals who do none or an insignificant amount of extracurricular work. The maximums for groups vary from a low of 6.00 hours for an individual from the group with 1 or 2 years teaching experience to 15.00 hours for an individual with 0 years teaching experience. The median times spent on extracurricular activities decrease as teaching experience increases, starting at a high of 2.00 hours and gradually decreasing to 0.50 hours. It appears that teachers with more teaching experience do not willingly accept and/or are not assigned as great an extracurricular load. The median test revealed that teachers with 0 years and 1 or 2 years teaching experience did significantly more, at the .05 level, of extracurricular work than did teachers with more teaching experience. A statistical relationship exists between teaching experience and the extracurricular load of a teacher.



TABLE XIII  
TEACHING EXPERIENCE AND TIME SPENT ON  
EXTRACURRICULAR ACTIVITIES

Years of Experience	Extracurricular Time		Significance*
	Range	Median	
0	0.00 to 15.00	2.00	.05
1 or 2	0.50 to 6.00	2.00	.05
3 to 5	0.00 to 8.00	1.00	nil
6 to 10	0.00 to 10.00	1.00	nil
11 to 20	0.00 to 12.00	1.00	nil
21 or more	0.00 to 10.00	0.50	nil
Total Group	0.00 to 15.00	1.00	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The total time required by teachers with different years of teaching experience for the various activities considered as part of a teaching load is presented in Table XIV. Minimums vary from a low of 26.50 hours for an individual from the group with 3 to 5 years teaching experience to 39.83 hours for an individual from the group with 0 years teaching experience. Maximums exceed 50.00 hours for all groups. Medians tend to show a gradual decrease from 47.87 hours, for teachers with 0 years teaching experience, as teaching experience increases. An exception to this is the group with 11 to 20 years teaching experience whose median time increased by 1.75 hours over the previous group. The lowest median teaching time is recorded by the group with 21 or more years teaching experience. This median time is 41.83 hours per week. The median test revealed that there is no significant difference, at the .05 level, between the time spent by any group as compared to all other groups in regards to total teaching load. Some groups spent a numerically greater but not significantly different amount of time on total teaching load.





TABLE XIV.

TEACHING EXPERIENCE AND TOTAL TIME SPENT  
ON VARIOUS TEACHING ACTIVITIES\*

Years of Experience	Total Teaching Time		Significance**
	Range	Median	
0	39.83 to 68.00	47.87	nil
1 or 2	32.17 to 60.00	44.70	nil
3 to 5	26.50 to 53.33	43.00	nil
6 to 10	30.00 to 58.58	42.00	nil
11 to 20	28.67 to 66.42	43.75	nil
21 or more	26.67 to 56.25	41.83	nil
Total Group	26.50 to 68.00	43.27	

\*Note: The "various teaching activities" are those outlined in Chapter II as being part of a teacher's normal duties.

\*\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



### Summary

A summary of significant differences between the time spent on various teaching activities by teachers with varying years of teaching experience and all other teachers is presented in Table XV. There is no significant difference between the time spent by teachers of any of the groups with varying years of teaching experience and all other teachers on (a) classroom instruction, (b) marking examinations and assignments, and (c) total time spent on various teaching duties. For preparation of lessons and materials there is a significant difference between the time spent on this activity by (a) teachers with 0 years teaching experience and all other teachers, and (b) teachers with 21 or more years experience and all other teachers. Teachers with 0 years teaching experience spent significantly more time while teachers with 21 or more years teaching experience spent significantly less time on the preparation of lessons and materials. In extracurricular time there is a significant difference between the time spent on this activity by (a) teachers with 0 years teaching experience and all other teachers, and (b) teachers with 1 or 2 years teaching experience and all other teachers. Teachers with 0 years and those with 1 or 2 years teaching experience spent significantly more time on extracurricular activities than did teachers of all other groups. No group had a significantly different teaching load as compared to all other groups. Teaching experience is not a factor in influencing total teaching load.



TABLE XV

SIGNIFICANT DIFFERENCES\* BETWEEN TIME SPENT ON VARIOUS  
TEACHING ACTIVITIES BY TEACHERS WITH VARYING YEARS  
OF TEACHING EXPERIENCE AND ALL OTHER TEACHERS

Years of Experience	Teaching Activity				Total Time
	Classroom Instruction	Preparation	Marking	Extracurricular Activities	
0	nil	.05	nil	.05	nil
1 or 2	nil	nil	nil	.05	nil
3 to 5	nil	nil	nil	nil	nil
6 to 10	nil	nil	nil	nil	nil
11 to 20	nil	nil	nil	nil	nil
21 or more	nil	.05	nil	nil	nil

\*Note: The information for significant difference for this table  
is based on data from Tables X to XIV.



## CHAPTER VI

### YEARS OF TRAINING AS A FACTOR IN TEACHING LOAD

The years of University and/or Normal School training in preparation for teaching is sometimes considered as a factor that may affect the work-week of teachers. The assumption is that the more extensive the period of training, the greater the background knowledge and extent of information from which a teacher may draw for use in various teaching activities. This may be a factor in reducing the work-week of teachers. In this chapter the years of training as a factor in affecting the work week of a teacher is examined.

The years of University and/or Normal School training for a sample of 201 Alberta high school teachers is presented in Table XIV. The groups from the largest to the smallest are: 4 to 4.9 years training (65), 2 to 2.9 years training (37), 5 to 5.9 years training (29), 3 to 3.9 years training (27), 1 to 1.9 years training (26), and 6 or more years training (17). Throughout this chapter the groupings as outlined in Table XVI will be used. The times given are as reported by teachers and are in hours and are for a period of one week.





TABLE XVI

YEARS OF TRAINING FOR A SAMPLE OF 201  
ALBERTA HIGH SCHOOL TEACHERS

Years of Training	Number
1 to 1.9	26
2 to 2.9	37
3 to 3.9	27
4 to 4.9	65
5 to 5.9	29
6 or more	17
Total	201

The years of training and assigned classroom instruction time are presented in Table XVII. The suggestion of Spears<sup>1</sup> that the load of beginning teachers should be lightened might be carried a step further to suggest that the more experienced and better trained teachers should accept a slightly heavier assigned classroom instruction time. The minimums for groups start from a low of 13.33 hours for the group with 1 to 1.9 years training and tend to

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<sup>1</sup>Harold Spears, Improving the Supervision of Instruction, (Eaglewood Cliffs, N.J.: Prentice-Hall, Inc., 1953), p. 197.



gradually increase for each group, with the exception of the groups with 6 or more and 3 to 3.9 years training, to reach a high of 18.00 hours for the group with 5 to 5.9 years of training. The maximum for each group is at or near 27.50 hours assigned classroom instruction time per week. The medians for the various groups show very little variation, being from a low of 21.00 hours for the group with 4 to 4.9 years of training to a high of 22.50 hours for the group with 6 or more years training. The median test revealed no significant difference, at the .05 level, in the time spent in classroom instruction by any group as compared to all other groups. No statistical relationship exists between years of training and assigned classroom instruction time.



TABLE XVII  
YEARS OF TRAINING AND ASSIGNED CLASSROOM  
INSTRUCTION TIME

Years of Training	Classroom Instruction		Significance*
	Range	Median	
1 to 1.9	13.33 to 27.50	22.00	nil
2 to 2.9	15.00 to 27.00	22.00	nil
3 to 3.9	14.58 to 26.67	22.25	nil
4 to 4.9	15.17 to 27.50	21.00	nil
5 to 5.9	18.00 to 27.50	22.00	nil
6 or more	13.45 to 27.50	22.50	nil
Total Group	13.33 to 27.50	21.63	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





The time required by teachers with varying amounts of training to prepare lessons and materials is presented in Table XVIII. As the years of training increase the time required to prepare lessons and materials might be expected to decrease. Table XVIII reveals that this is not so. The minimums vary from 0.00 hours for an individual with 3 to 3.9 years of training to 3.00 hours for individuals from the groups with 1 to 1.9 and 6 or more years of training. The maximums are 20.00 hours for all groups with the exception of the group with 6 or more years of training, which has as the high individual maximum 15.00 hours. The medians for the various groups vary only one-half an hour, varying from 7.00 to 7.50 hours. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. The possible assumption that the greater the degree of training the less time required to prepare lessons and materials is not verified. Years of training is not a factor in the time required to prepare lessons and materials required in classroom teaching.



TABLE XVIII

YEARS OF TRAINING AND TIME SPENT ON PREPARATION  
OF LESSONS AND MATERIALS

Years of Training	Preparation time		Significance*
	Range	Median	
1 to 1.9	3.00 to 20.00	7.00	nil
2 to 2.9	2.50 to 20.00	7.50	nil
3 to 3.9	0.00 to 20.00	7.00	nil
4 to 4.9	1.00 to 20.00	7.50	nil
5 to 5.9	1.00 to 20.00	7.50	nil
6 or more	3.00 to 15.00	7.00	nil
Total Group	0.00 to 20.00	7.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time required by teachers with varying amounts of training to mark examinations and assignments is presented in Table XIX. The years of training should influence the background knowledge about a subject which may have an influence on the amount of time required to mark examinations and assignments. Each group has considerable range in the amount of time required to mark examinations and assignments. Minimums for groups range from 0.00 hours for the groups with 2 to 2.9, 3 to 3.9, and 6 or more years training to 1.50 hours for the group with 4 to 4.9 years training. Maximums range from 13.00 hours for the group with 2 to 2.9 years training to 20.00 hours for the group with 4 to 4.9 years of training. The medians vary by only one hour, varying from a low of 5.00 hours for the groups with 2 to 2.9, 5 to 5.9, and 6 or more years of training to 6.00 hours for the group with 1 to 1.9 years of training. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Years of training is not a factor in influencing the amount of time required to mark examinations and assignments.



TABLE XIX

YEARS OF TRAINING AND TIME SPENT ON MARKING  
EXAMINATIONS AND ASSIGNMENTS

Years of Training	Marking Time		Significance*
	Range	Median	
1 to 1.9	1.00 to 15.00	6.00	nil
2 to 2.9	0.00 to 13.00	5.00	nil
3 to 3.9	0.00 to 14.00	5.17	nil
4 to 4.9	1.50 to 20.00	5.50	nil
5 to 5.9	1.00 to 18.00	5.00	nil
6 or more	0.00 to 15.00	5.00	nil
Total Group	0.00 to 20.00	5.33	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





The time spent on extracurricular activities by teachers with varying amounts of training is presented in Table XX. All groups have individuals who spend no time on extracurricular activities. This is to be expected since 34.9 per cent of the teachers do not take part in any extracurricular work. Maximums vary from a low of 6.00 hours for the groups with 3 to 3.9, and 5 to 5.9 years of training to a high of 12.00 hours for the groups with 1 to 1.9 and 4 to 4.9 years of training. The median times spent on extracurricular activities are more consistent. The medians for all groups with less than 4 years training are 1.00 hour while those with 4 or more years of training have medians of 1.50 hours. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. Years of training is not a factor in influencing the amount of time spent on extracurricular activities.



TABLE XX

YEARS OF TRAINING AND TIME SPENT ON  
EXTRACURRICULAR ACTIVITIES

Years of Training	Extracurricular Time		Significance*
	Range	Median	
1 to 1.9	0.00 to 12.00	1.00	nil
2 to 2.9	0.00 to 8.00	1.00	nil
3 to 3.9	0.00 to 6.00	1.00	nil
4 to 4.9	0.00 to 12.00	1.50	nil
5 to 5.9	0.00 to 6.00	1.50	nil
6 or more	0.00 to 10.00	1.50	nil
Total Group	0.00 to 12.00	1.00	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The total time required by teachers with varying amounts of training for the various activities associated with teaching is presented in Table XXI. The range in time spent by individuals varies considerably. The lowest minimum time, at 26.00 hours, is for an individual from the group with 2 to 2.9 years of training, while the highest minimum was 39.00 hours for an individual from the group with 6 or more years training. Maximums range from a low of 53.83 hours for an individual from the group with 3 to 3.9 years training to 66.42 hours for an individual from the group with 4 to 4.9 years of training. Medians range from a low of 42.17 hours to a high of 45.17 hours for the groups with 2 to 2.9 years and 6 or more years of training respectively. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. No statistical relationship exists between years of training and the total work-week of teachers.





TABLE XXI

YEARS OF TRAINING AND TIME SPENT ON  
VARIOUS TEACHING ACTIVITIES\*

Years of Training	Total Teaching Time		Significance**
	Range	Median	
1 to 1.9	30.08 to 58.58	44.75	nil
2 to 2.9	26.00 to 58.85	42.17	nil
3 to 3.9	26.50 to 53.83	42.38	nil
4 to 4.9	30.00 to 66.42	43.50	nil
5 to 5.9	30.42 to 59.50	43.50	nil
6 or more	39.00 to 55.67	45.17	nil
Total Group	26.00 to 66.42	43.27	

\*Note: The "various teaching activities" are those outlined in Chapter II as being part of a teacher's normal duties.

\*\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



## SUMMARY

A summary of significant differences between the time spent on various teaching activities by teachers with varying years of teacher training and all other teachers is presented in Table XXII. There is no significant difference between the time spent by teachers with varying years of teacher training and all other teachers on (a) classroom instruction, (b) preparation of lessons and materials, (c) marking examinations and assignments, (d) extracurricular activities, and (e) total time. No significant differences exist in the time required to perform various teaching duties nor in total teaching time for teachers with varying years of teacher training. Years of teacher training is not a factor in influencing total teaching load.



TABLE XXII

SIGNIFICANT DIFFERENCES\* BETWEEN TIME SPENT ON VARIOUS  
TEACHING ACTIVITIES BY TEACHERS WITH VARYING YEARS  
OF TEACHER TRAINING AND ALL OTHER TEACHERS

Years of Training	Teaching Activity				
	Classroom Instruction	Preparation	Marking	Extracurricular Activities	Total Time
1 to 1.9	nil	nil	nil	nil	nil
2 to 2.9	nil	nil	nil	nil	nil
3 to 3.9	nil	nil	nil	nil	nil
4 to 4.9	nil	nil	nil	nil	nil
5 to 5.9	nil	nil	nil	nil	nil
6 or more	nil	nil	nil	nil	nil

\*Note: The information for significant differences for this Table is based on data from Tables XVII to Table XXI.



## CHAPTER VII

### SEX OF A TEACHER AS A FACTOR IN TEACHING LOAD

The basic assumption is that there is no differentiation between sexes in teaching since teachers, regardless of sex, are expected to perform equivalent work under similar conditions. In this chapter this assumption is examined with the supposition that there may be differences in the time spent upon individual tasks, the knowledge of which can be of value to administrators.

For all tables that follow in this chapter the groups and the number in each group will be according to Table XXIII. The times in all cases will be given in hours and are for a period of one week. The times are those as reported by teachers.

TABLE XXIII

THE SEX OF A SAMPLE OF 205 ALBERTA  
HIGH SCHOOL TEACHERS

Sex	Number
Female	95
Male	110
Total	205





The sex of teachers and assigned classroom instruction time are presented in Table XXIV. The range for both groups is 13.33 to 27.50 hours. The median time for females is 21.50 hours while for males it is 21.80 hours. The median test for two independent groups revealed no significant difference, at the .05 level, between the time spent by these two groups in classroom instruction. No statistical relationship exists between the sex of a teacher and the assigned classroom instruction time.

TABLE XXIV  
SEX OF TEACHER AND ASSIGNED CLASSROOM  
INSTRUCTION TIME

Sex	Classroom Instruction		Significance
	Range	Median	
Female	13.33 to 27.50	21.50	nil
Male	13.33 to 27.50	21.80	nil
Group	13.33 to 27.50	21.63	



The time required by teachers of either sex for the preparation of lessons and materials is presented in Table XXV. The range in time spent by females is from 1.00 to 20.00 hours while the range for males is 0.00 to 20.00 hours. The median time spent by females is 7.75 hours while males have a median time of 7.25 hours. The median test for two independent groups revealed no significant difference, at the .05 level, between the time spent by these two groups on preparation of lessons and materials. The sex of the teacher is not a factor in the amount of time spent on the preparation of lessons and materials.

TABLE XXV  
SEX OF TEACHER AND TIME SPENT ON PREPARATION  
OF LESSONS AND MATERIALS

Sex	Preparation Time		Significance
	Range	Median	
Female	1.00 to 20.00	7.75	nil
Male	0.00 to 20.00	7.25	nil
Group	0.00 to 20.00	7.50	



The time required by teachers of either sex to mark examinations and assignments is presented in Table XXVI. Both groups have a range of 0.00 to 20.00 hours for marking time. The median time for females is 6.25 hours while for males it is 5.20 hours. The median test for two independent groups revealed that the medians of these two groups differ significantly at the .05 level. Female teachers spend significantly more time marking examinations and assignments than do their male counterparts.

TABLE XXVI  
SEX OF TEACHER AND TIME SPENT ON MARKING  
EXAMINATIONS AND ASSIGNMENTS

Sex	Marking Time		Significance
	Range	Median	
Female	0.00 to 20.00	6.25	.05
Male	0.00 to 20.00	5.20	.05
Group	0.00 to 20.00	5.33	



The time spent by teachers of either sex on extracurricular activities is presented in Table XXVII. The range in time for females is 0.00 to 10.00 hours while for the males it is 0.00 to 15.00 hours. The median time for females is 0.50 hours while the median time for males is 1.50 hours. The median test for two independent groups revealed a significant difference, at the .01 level, between these two medians. Male teachers spend significantly more time on extracurricular activities than do female teachers.

TABLE XXVII  
SEX OF TEACHER AND TIME SPENT ON  
EXTRACURRICULAR ACTIVITIES

Sex	Extracurricular Time		Significance
	Range	Median	
Female	0.00 to 10.00	0.50	.01
Male	0.00 to 15.00	1.50	.01
Group	0.00 to 15.00	1.00	





The total time required by teachers of either sex for the various activities associated with teaching is presented in Table XXVIII. The range in time for females is 26.00 to 66.42 hours while for males it is 26.50 to 68.00 hours. The median time for females is 43.00 hours. The median time for males is 43.50 hours. The median test revealed no significant difference, at the .05 level, between the time spent by these two groups. No statistical relationship exists between the sex of the teachers and total teaching load.

TABLE XXVIII  
SEX OF TEACHER AND TIME SPENT ON  
VARIOUS TEACHING ACTIVITIES\*

Sex	Total Work Week		Significance
	Range	Median	
Female	26.00 to 66.42	43.00	nil
Male	26.50 to 68.00	43.50	nil
Group	26.00 to 68.00	43.27	

\*Note: The "various teaching activities" are those activities outlined in Chapter II as being part of a teacher's normal duties.



### Summary

A summary of significant differences between the time spent on various teaching activities by male and female teachers is presented in Table XXIX. There is no significant difference between the time spent by male and female teachers on (a) classroom instruction, (b) preparation of lessons and materials, and (c) total teaching time. A significant difference exists between the times spent by male and female teachers on (a) marking, and (b) extracurricular activities. Male teachers spend significantly less time on marking but significantly more time on extracurricular activities than their female counterparts. No significant difference exists between total teaching load for male and female teachers. The sex of a teacher is not a factor influencing total teaching load.



TABLE XXIX

SIGNIFICANT DIFFERENCES\* BETWEEN TIME SPENT ON  
VARIOUS TEACHING ACTIVITIES BY MALE  
AND FEMALE TEACHERS

Sex of Teacher	Teaching Activity				
	Classroom Instruction	Preparation	Marking	Extracurricular Activities	Total Time
Male	nil	nil	.05	.01	nil
Female	nil	nil	.05	.01	nil

\*Note: The information for significant differences for this table is based on data from Table XXIV to Table XXVIII.



## CHAPTER VIII

### SIZE OF HIGH SCHOOL AS A FACTOR IN TEACHING LOAD

The number of high school teachers in a school may be a factor in influencing total teaching load. High school teachers in the smaller high schools may have to offer a wider variety of subjects, some of which may be out of their special field of training. Teachers in the larger high schools should be in their major and/or minor field of training and may have two classes for the same subject. These conditions could affect preparation time for a teacher. Besides classroom instruction a number of other activities - extracurricular, clerical, guidance, students' union - must be performed by teachers. The fewer the number of teachers the greater the number of activities that may have to be performed by one teacher. The size of the high school as a factor in influencing total teaching load is examined in this chapter.

For all tables that follow in this chapter the groups and the number in each group will be according to Table XXX. The times in all cases are in hours and are for a period of one week. The times are those as reported by teachers on their questionnaire. Twenty-five teachers were in standard instruction time high schools which had 2 or 3 teachers for the high school section. Seventy-two teachers were in four or five teacher high schools. Six or 7 teacher high schools composed a group of 66. Forty-three teachers composed the group for high schools of 8, 9, or 10 teachers. Two hundred and six teachers were involved in this grouping.





TABLE XXX

SIZE OF HIGH SCHOOLS FOR A SAMPLE OF 206  
ALBERTA HIGH SCHOOL TEACHERS

Size of High School	Number of Teachers
2 or 3 teachers	25
4 or 5 teachers	72
6 or 7 teachers	66
8, 9, or 10 teachers	43
Total Group	206

The assigned classroom instruction time for teachers in the variously sized high schools is presented in Table XXXI. The range in assigned classroom instruction time for individuals varies considerably. The minimum assigned classroom instruction time is 13.33 hours for individuals from 4 to 5 and 8 to 10 teacher high schools. The maximums are 27.50 hours for all groups except the 8 to 10 teacher high school group which has as the high individual maximum 26.67 hours. The medians vary from a low of 21.00 hours for the 4 to 5 teacher high schools to a high of 23.00 hours for the 2 to 3 teacher high schools. The median time for all groups is 21.63 hours. The median test for significant difference between independent groups revealed a significant difference, at the .01 level, between assigned classroom instruction time for 2 to 3 teacher high schools as compared to all other groups. Teachers in the 2 to 3 teacher high schools have a significantly greater assigned classroom instruction time than do teachers in the larger high schools.



TABLE XXXI

SIZE OF HIGH SCHOOL AND ASSIGNED CLASSROOM  
INSTRUCTION TIME

Number of Teachers	Classroom Instruction		Significance*
	Range	Median	
2 or 3	13.45 to 27.50	23.00	.01
4 or 5	13.33 to 27.50	21.00	nil
6 or 7	15.00 to 27.50	21.50	nil
8, 9, or 10	13.33 to 26.67	21.60	nil
Total Group	13.33 to 27.50	21.63	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The time required by teachers in variously sized high schools for the preparation of lessons and materials is presented in Table XXXII. The range in time required by individuals for the preparation of lessons and materials varies considerably. The range for 2 to 3 teacher high schools is 2.00 to 15.00 hours, for 4 to 5 and also 6 to 7 teacher high schools it is 1.00 to 20.00 hours, and for 8 to 10 teacher high schools the range is 0.00 to 15.00 hours. The medians for the groups are: 7.00 hours for the 2 to 3 teacher high schools, 8.00 hours for the 4 to 5 teacher high schools, 6.50 hours for the 6 to 7 teacher high schools, and 6.00 hours for the 8 to 10 teacher high schools. The median test for independent groups revealed no significant difference, at the .05 level of significance, between the time spent by any group as compared to all other groups. The size of the high school is not a factor in influencing the amount of time spent on the preparation of lessons and materials.



TABLE XXXII

SIZE OF HIGH SCHOOL AND TIME SPENT ON  
PREPARATION OF LESSONS AND MATERIALS

Number of Teachers	Preparation Time		Significance*
	Range	Median	
2 or 3	2.00 to 15.00	7.00	nil
4 or 5	1.00 to 20.00	8.00	nil
6 or 7	1.00 to 20.00	6.50	nil
8, 9, or 10	0.00 to 15.00	6.00	nil
Total Group	0.00 to 20.00	7.48	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





The time spent by teachers of variously sized high schools on extracurricular activities is presented in Table XXXIII. As in previous chapters all groups have individuals who spend no time on extracurricular activities. The maximums for the various groups are: 8.00 hours for the 6 to 7 teacher high schools, 10.00 hours for the 8 to 10 teacher high schools, 12.00 hours for the 2 to 3 teacher high schools, and 15.00 hours for the 4 to 5 teacher high schools. The medians vary from .50 hours for the 2 to 3 teacher high schools to 1.50 hours for the 8 to 10 teacher high schools. The median test for independent groups revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. No statistical relationship exists between the size of the high school and the time spent by teachers on extracurricular activities.



TABLE XXXIII

SIZE OF HIGH SCHOOL AND TIME SPENT ON  
EXTRACURRICULAR ACTIVITIES

Number of Teachers	Extracurricular Time		Significance*
	Range	Median	
2 or 3	0.00 to 12.00	0.50	nil
4 or 5	0.00 to 15.00	1.00	nil
6 or 7	0.00 to 8.00	1.00	nil
8 to 10	0.00 to 10.00	1.50	nil
Total Group	0.00 to 15.00	1.00	

\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.



The total time required by teachers from variously sized high schools for the various teaching activities is presented in Table XXXIV. The range in time spent on the various teaching activities is considerable. The minimums vary from 26.00 hours for an individual from the 6 to 7 teacher high school group to 30.42 hours for an individual from the 4 to 5 teacher high school group. Maximums range from 60.00 to 68 hours for the 8 to 10 and 4 to 5 teacher high schools respectively. Variations in time for individuals within a group in all cases exceed 30.00 hours. The medians for the groups start from a low of 42.83 hours for the 8 to 10 teacher group and tend to rise, as the size of the school decreases, reaching a high median of 44.75 hours for the group from the 2 to 3 teacher high schools. The median for all teachers is 43.27 hours. The median test revealed no significant difference, at the .05 level, between the time spent by any group as compared to all other groups. No statistical relationship exists between the size of a high school and the total work-week of a teacher.



TABLE XXXIV  
 SIZE OF HIGH SCHOOL AND TIME SPENT  
 ON VARIOUS TEACHING ACTIVITIES\*

Number of Teachers	Total Teaching Time		Significance**
	Range	Median	
2 or 3	30.00 to 64.75	44.75	nil
4 or 5	30.42 to 68.00	43.67	nil
6 or 7	26.00 to 66.42	43.25	nil
8 to 10	26.50 to 60.00	42.83	nil
Total Group	26.00 to 68.00	43.27	

\*Note: The "various teaching activities" are those outlined in Chapter II as being part of a teacher's normal duties.

\*\*Note: The calculation of significant difference was based upon a comparison of each group to all remaining groups.





## SUMMARY

A summary of significant differences between the time spent on various teaching activities by teachers from variously sized high schools and all other teachers is presented in Table XXXV. There is a significant difference between the time spent on classroom instruction for the teachers from the 2 to 3 teacher high schools as compared to all other teachers. Teachers in the 2 to 3 teacher high schools are assigned a significantly greater classroom instruction time than are the other teachers. There is no significant difference between the time spent by teachers from variously sized high schools and all other teachers on (a) preparation of lessons and materials, (b) extracurricular activities, and (c) total time. No significant difference exists between the time spent by teachers from the variously sized high schools on total teaching load. The size of the high school is not a factor in influencing total teaching load.



TABLE XXXV

SIGNIFICANT DIFFERENCES\* BETWEEN THE TIME SPENT ON VARIOUS  
TEACHING ACTIVITIES BY TEACHERS FROM VARIOUSLY  
SIZED HIGH SCHOOLS AND ALL OTHER TEACHERS

Number of Teachers	Teaching Activity			
	Classroom Instruction	Preparation	Extracurricular Activities	Total Time
2 or 3	.01	nil	nil	nil
4 or 5	nil	nil	nil	nil
6 or 7	nil	nil	nil	nil
8, 9, or 10	nil	nil	nil	nil

\*Note: The information for significant differences for this Table  
is based on data from Tables XXXI to Table XXXIV.



## CHAPTER IX

### TEACHER DISSATISFACTION

This chapter presents an analysis of teacher dissatisfaction. The analysis is in three parts.

1. The degree of teacher dissatisfaction with the existing teaching load.
2. The relationship between the factors of subject field, teaching experience, training, size of the high school, and sex of the teacher on teacher dissatisfaction.
3. The specific complaints made by teachers of various subject fields and the general complaints which were common to all subject fields.

Figure 2 illustrates that there was in general considerable teacher dissatisfaction with the teaching load. Of the total sample of 206 teachers, 83 (40.8 per cent) indicated that they were dissatisfied with their teaching load, 80 (38.8 per cent) indicated satisfaction with their teaching load and 43 (20.4 per cent) did not state whether they were satisfied or dissatisfied with their teaching load.



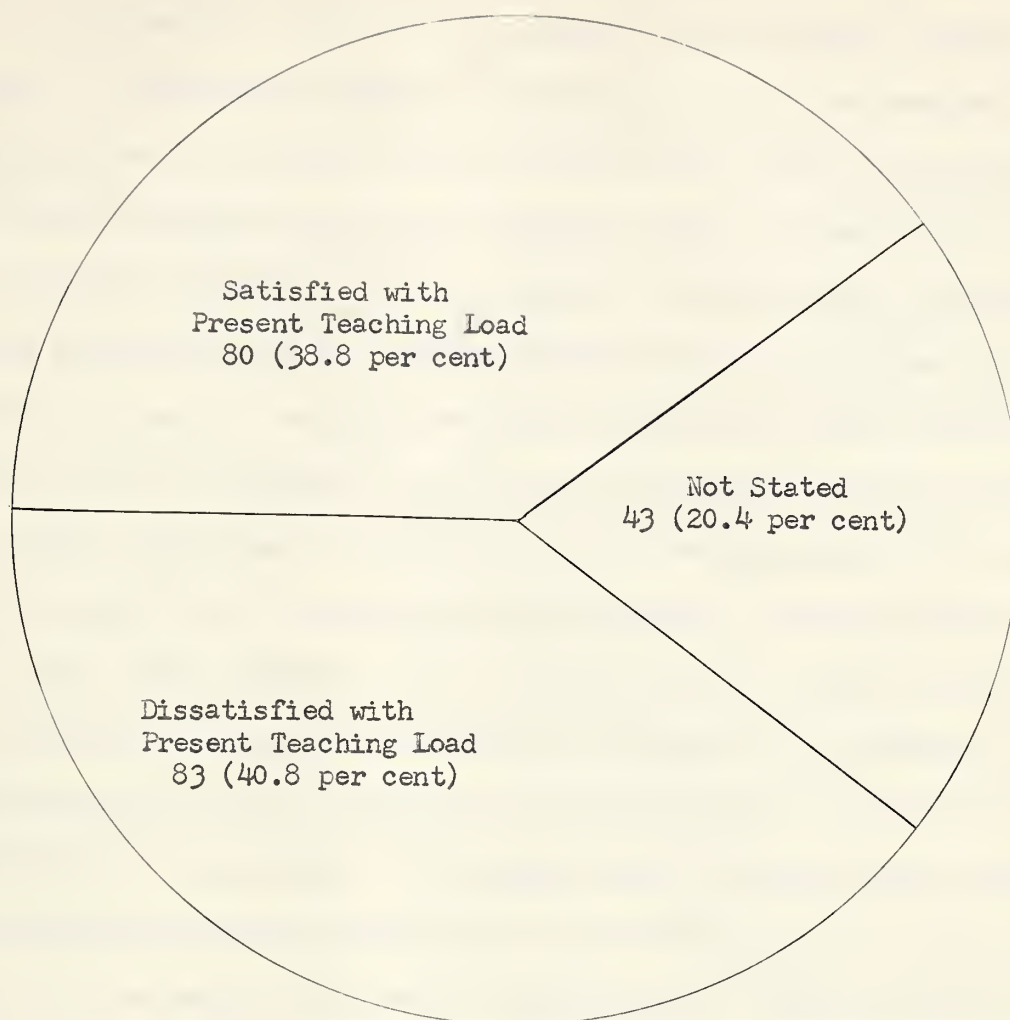


FIGURE 2

DEGREE OF TEACHER DISSATISFACTION FOR EXISTING  
TEACHING LOAD FOR A SAMPLE OF 206 CENTRAL  
ALBERTA HIGH SCHOOL TEACHERS





A connection between total teaching load and teacher dissatisfaction is indicated by Figure 3. Eighty per cent of the teachers whose teaching load is 25 hours or more but less than 30 hours are satisfied with their teaching load and the remaining twenty per cent of this group feel that they should be carrying a greater teaching load. The highest degree of satisfaction for teaching load is for the group whose total load was 30 hours or more but less than 35 hours per week. Of this group 90 per cent are satisfied, five per cent are dissatisfied, and five per cent think they should be carrying a greater teaching load. As teaching loads increase over 35 hours per week the degree of teacher satisfaction with these loads decreases. For teaching loads of 45 hours or greater but less than 50 hours per week only 46.9 per cent of the teachers are satisfied and all of the remainder of this group feel that a decrease in teaching load is desirable. All teachers whose teaching load exceeds 60 hours per week are dissatisfied with their teaching load. In general, Figure 3 illustrates that teacher satisfaction is closely connected to total teaching load and as the total teaching load increases the degree of teacher satisfaction with that load decreases.



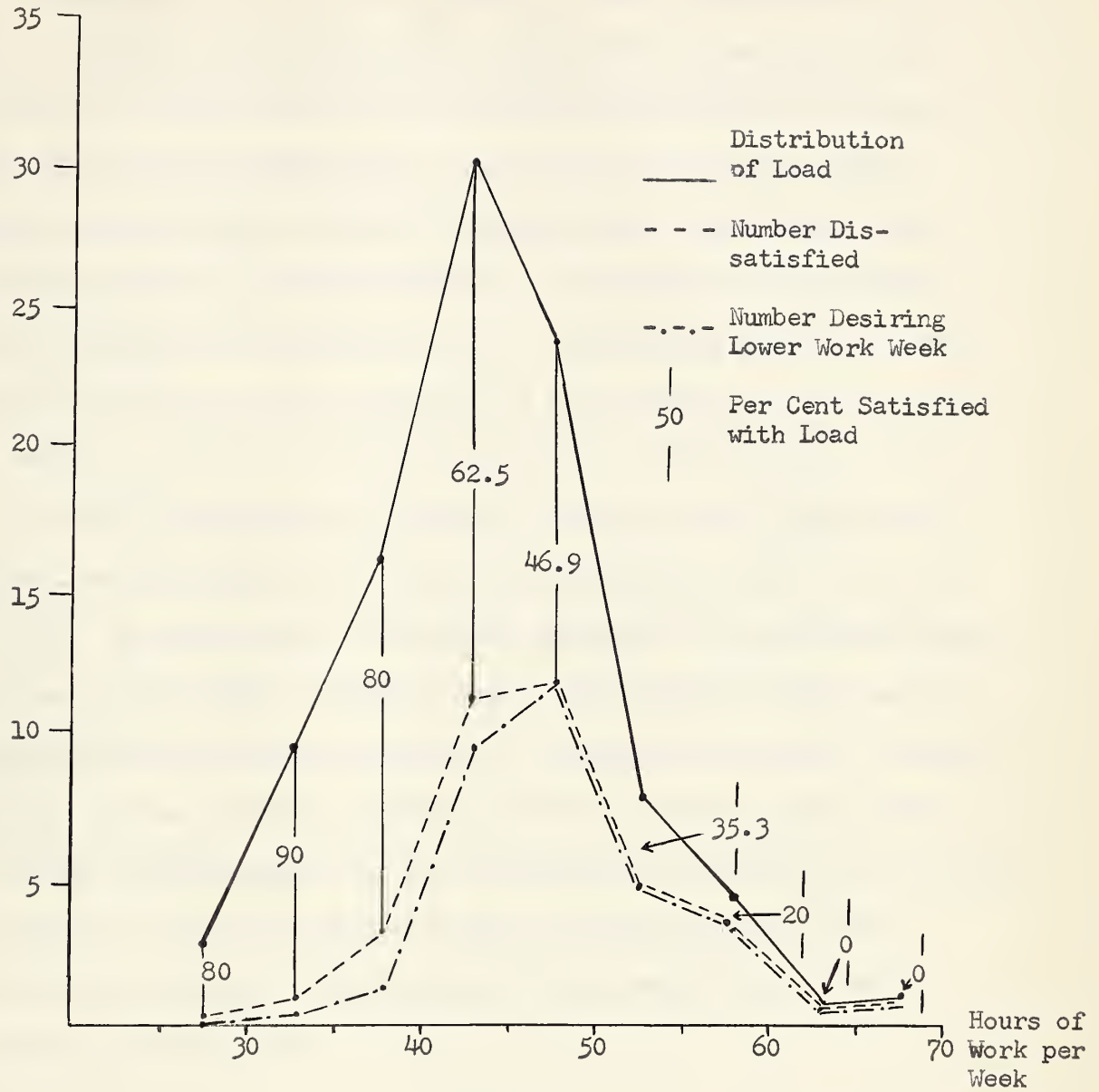


FIGURE 3

DISTRIBUTION OF TEACHING LOAD AND DISSATISFACTION AMONG  
A SAMPLE OF 206 ALBERTA HIGH SCHOOL TEACHERS



Some idea of the relative degree of teacher dissatisfaction in various subject areas is presented in Table XXXVI. Teachers of Home Economics and Industrial Arts are the least dissatisfied of any group with their present teaching load. Only 13 per cent of this group express dissatisfaction with their teaching load. Other groups show a sharp increase in job dissatisfaction as contrasted to the teachers of Home Economics and Industrial Arts. The following degrees of teacher dissatisfaction with their teaching load are shown by the various groups: Off Pattern - 34.4 per cent; Foreign Languages - 36.4 per cent; Others - 42.9 per cent; Mathematics and Science - 44.2 per cent; Social Studies, English, and Literature - 50.0 per cent; and Business Education - 57.1 per cent. An examination of the median work-week for the various groups, as shown in Table XXXI, indicates that, within general limits, as the median work-week increases the degree of dissatisfaction also increases. Teachers of Home Economics and Industrial Arts have the lowest degree of teacher dissatisfaction and the lowest median work-week at 40.00 hours. The teachers of Business Education have the highest degree of dissatisfaction with their teaching load and the second highest median work-week at 44.75 hours.



TABLE XXXVI

DEGREE OF DISSATISFACTION EXPRESSED BY TEACHERS IN VARIOUS  
SUBJECT FIELDS FOR EXISTING TEACHING LOAD FOR A SAMPLE  
OF 206 CENTRAL ALBERTA HIGH SCHOOL TEACHERS

Subject Field	Per Cent Dissatisfied	Median Work-Week
Home Economics and Industrial Arts	13	40.00
Off Pattern	34.4	43.00
Foreign Languages	36.4	43.00
Others	42.9	42.50
Mathematics and Science	44.2	43.50
Social Studies, English, and Literature	50.00	44.83
Business Education	57.1	44.75





Figure 4 compares years of teaching experience and degree of dissatisfaction with existing teaching load. Almost two-fifths (38.4 per cent) of the teachers with no teaching experience indicate dissatisfaction with their teaching load. Only about one-quarter (26.7 per cent ) of the teachers with 1 or 2 years experience are dissatisfied with their teaching load. Teachers with 3 to 5 years experience show a sharp increase in teaching load dissatisfaction to almost one-half (46.7 per cent) of this group. For the groups that follow there is a slow but steady decline in teaching load dissatisfactions as teaching experience increases. Only about two-fifths (38.2 per cent) of the teachers with 21 or more years experience are dissatisfied with their teaching load. Some reservation must be placed upon the degree of dissatisfaction expressed by teachers with 2 or less years of teaching experience. The calculations are based upon those who expressed dissatisfaction and does not show the almost one-third (32.1 per cent) who did not express an opinion or who said that they were too inexperienced to adequately judge their teaching load.



Percentage  
Dissatisfied

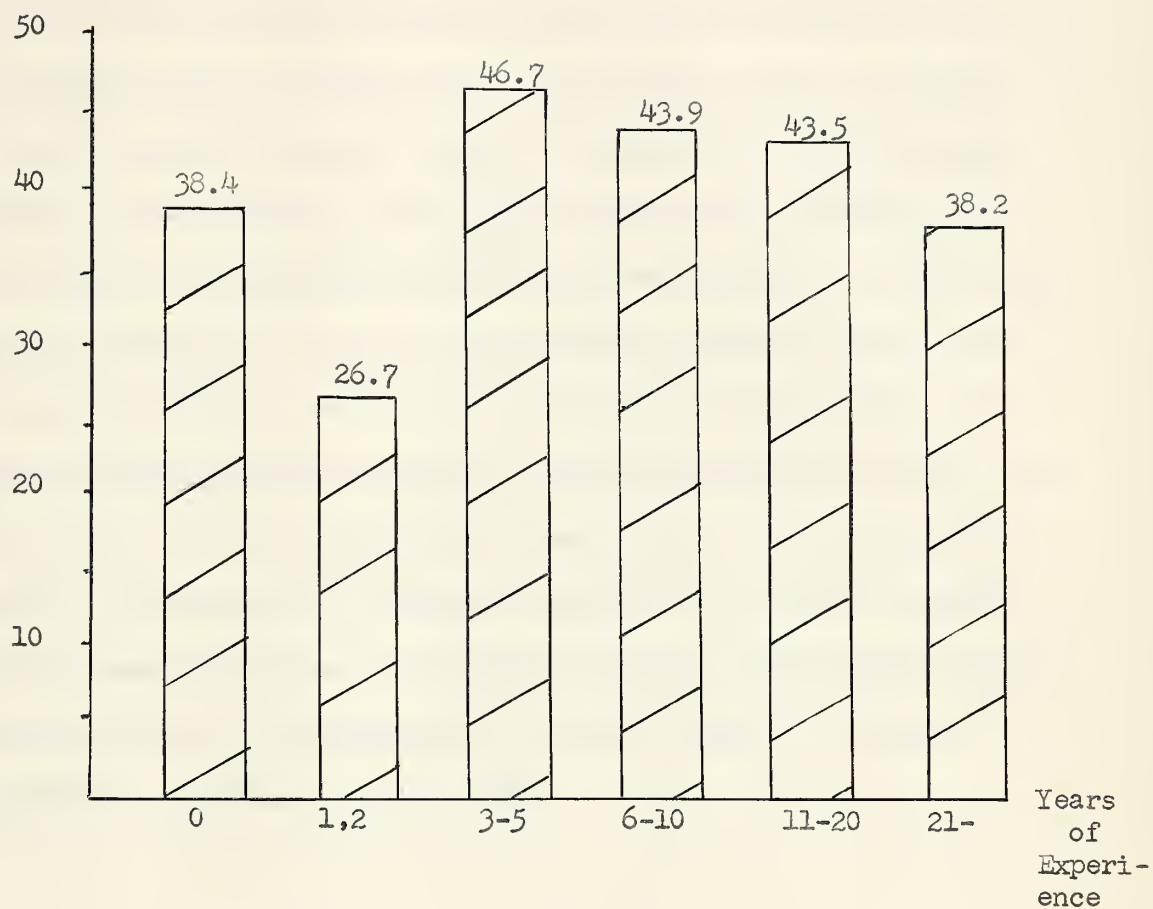


FIGURE 4

PERCENTAGE OF TEACHERS WITH VARYING YEARS OF  
TEACHING EXPERIENCE WHO ARE DISSATISFIED  
WITH THEIR TEACHING LOAD



Years of training and the degree of teacher dissatisfaction with teacher load are presented in Figure 5. Almost two-fifths (39.0 per cent) of the teachers with less than 2 years of training are dissatisfied with their teaching load. For teachers with 2 or more but less than 3 years of training there is a sharp decline in the degree of teacher dissatisfaction. Only about one-quarter (26.8 per cent) of this group are dissatisfied with their teaching load. A sharp rise to almost one-half (47.2 per cent) expressing dissatisfaction occurs for the group with 3 or more but less than 4 years of training. The degree of dissatisfaction declines to about two-fifths (40.2 per cent) of the group with 4 or more but less than 5 years of training. After this point the per cent of teachers dissatisfied with their teaching load increases as the years of training increase. Almost three-fifths (58.9 per cent) of the teachers with 6 or more years of training are dissatisfied with their teaching load.



Percentage  
Dissatisfied

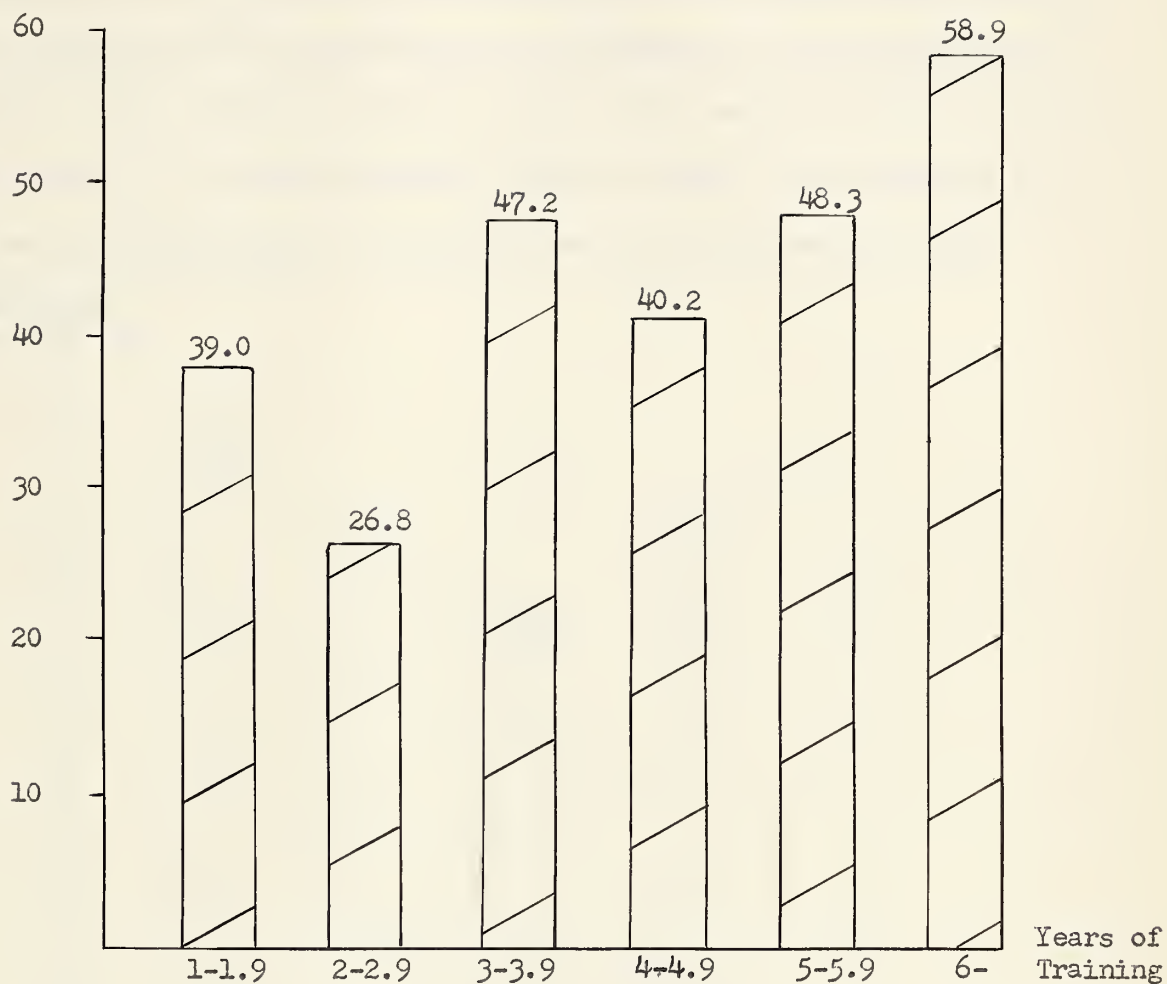


FIGURE 5

PERCENTAGE OF TEACHERS WITH VARYING YEARS OF  
TRAINING WHO ARE DISSATISFIED  
WITH THEIR TEACHING LOAD





The size of the high school and the percentage of teachers dissatisfied with their teaching load are presented in Figure 6. Almost one-half (48.0 per cent) of the teachers in 2 to 3 teacher high schools, over two-fifths (41.7 per cent) of the teachers in 4 to 5 teacher high schools, over one-third (36.4 per cent) of the teachers in 6 to 7 teacher high schools, and over two-fifths (41.9 per cent) of the teachers in 8 to 10 teacher high schools are dissatisfied with their teaching load.

Percentage  
Dissatisfied

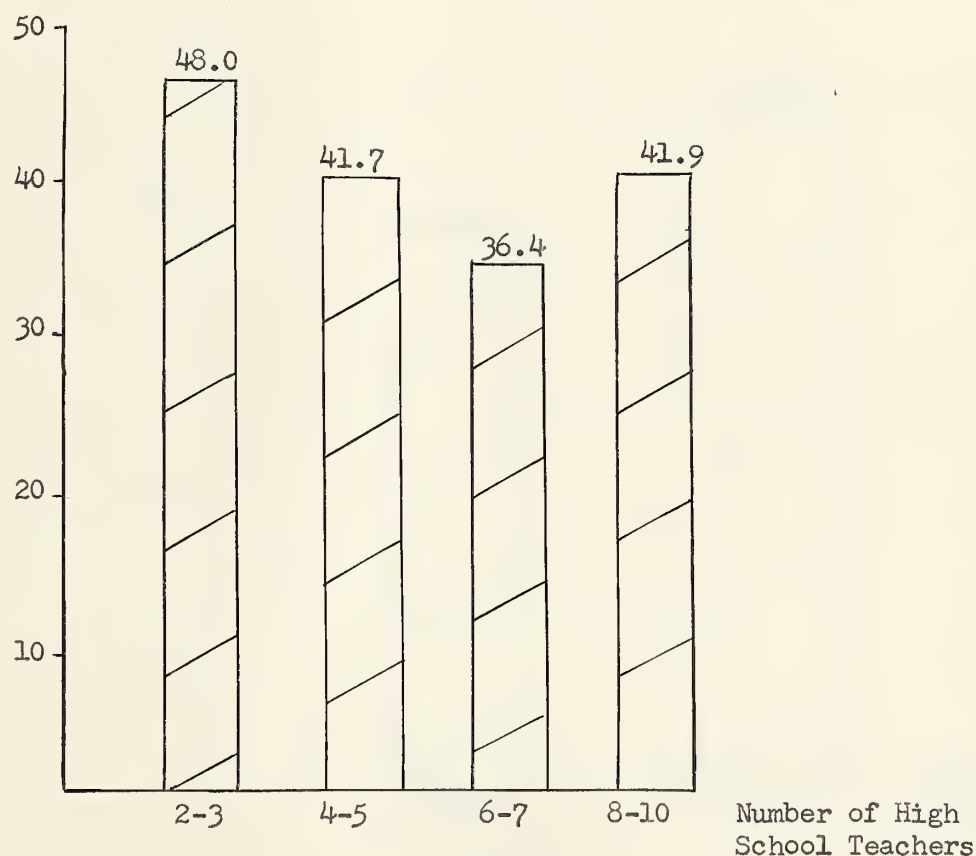


FIGURE 6

PERCENTAGE OF TEACHERS IN VARIOUSLY SIZED HIGH SCHOOLS  
WHO ARE DISSATISFIED WITH THEIR TEACHING LOAD



The sex of the teacher and the percentage of teachers dissatisfied with the teaching load are presented in Figure 7. Almost one-half (45.5 per cent ) of the male teachers as compared to over one-third (36.8 per cent) of the female high school teachers are dissatisfied with their teaching load.

Percentage  
Dissatisfied

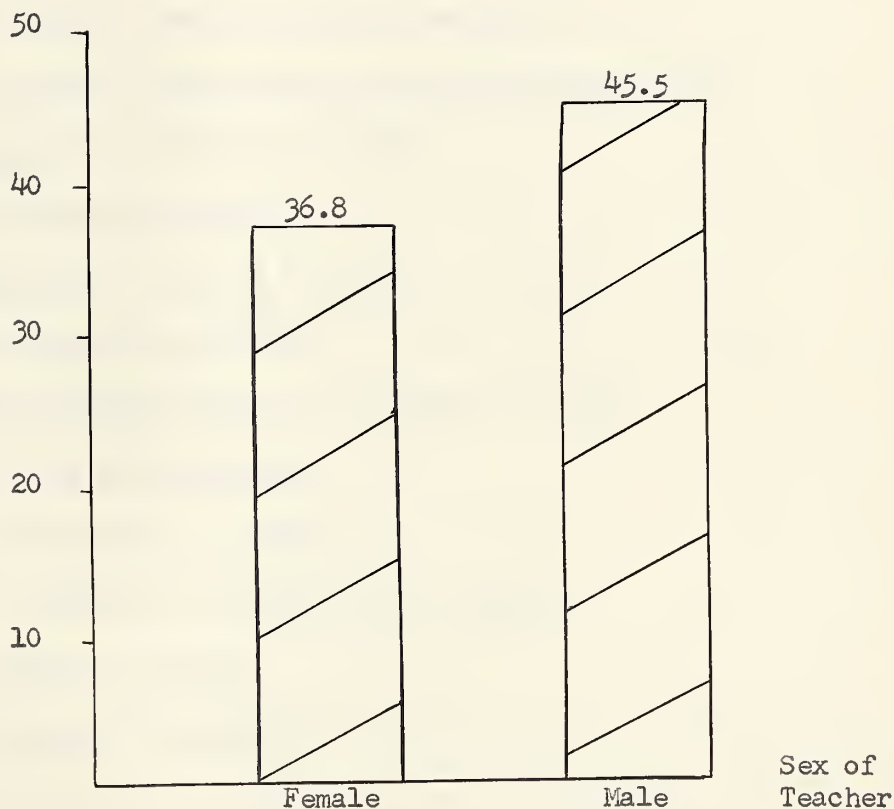


FIGURE 7

PERCENTAGE OF MALE AND FEMALE TEACHERS WHO ARE  
DISSATISFIED WITH THEIR TEACHING LOAD



Specific Teacher Complaints For Teachers  
In Various Subject Fields

The number in the brackets before the complaint indicates the frequency a particular item was mentioned.

Mathematics-Science (43 teachers in group)

- (6) No provision for time to set up or take down equipment.

Social Studies-English-Literature (66 teachers in group)

- (9) Too much time required for marking.
- (3) No school time provided for marking.
- (3) No school time provided for lesson preparation.

Foreign Languages (11 teachers in group)

No specific complaint.

Business Education (7 teachers in group)

No specific complaint.

Home Economics-Industrial Arts (23 teachers in group)

No specific complaint.

Off Pattern (32 teachers in group)

- (2) No training in subjects to be taught.

Others (21 teachers in group)

No specific complaint.



## General Complaints For All Subject Fields

The number in the bracket indicates the frequency of that particular complaint.

- (13) Classes too large.
- (12) Too many extracurricular activities.
- (10) Too wide a variety of subjects to prepare for.
- (5) Credit load too great.
- (6) Should not have to supervise noon hours.
- (5) Should not have to supervise study periods.
- (4) Extracurricular work not shared evenly.
- (4) Too much time spent on meetings.
- (3) Too much clerical work.
- (3) Too much time required for lesson preparation.
- (3) Lack of duplication of subjects which would help reduce load.
- (2) Lack of a free period a day.
- (2) Too much time on marking.

## Summary

Considerable teacher dissatisfaction was expressed concerning existing teaching load. A general trend was established for increased teacher dissatisfaction as the hourly work-week increased. No definite and consistent trends were established between degree of dissatisfaction and the factors of teaching experience, years of training, and size of





high school. Male teachers were found to be more dissatisfied than female teachers with their teaching load. Teachers had a fairly extensive list of specific and general complaints concerning their existing teaching duties.



## CHAPTER X

### TEACHING LOADS AS RECOMMENDED BY TEACHERS AND PRINCIPALS

In many occupations at the present day time one of the factors in job satisfaction is how nearly the working conditions correspond to the working conditions as envisaged by the individual. The ideal working conditions, as suggested by two individuals, will likely be somewhat different, but the average conditions proposed by a large group should be close to what is reasonably acceptable to the entire group. In this chapter a comparison is made between the hours of work for various tasks, as recommended by teachers and principals, and the actual time spent by teachers on these various tasks.

Table XXXVII presents the source of information for the analyses carried out in this chapter. Seventy principals made recommendations as to the time that should be spent on various teaching activities. Eighty teachers who were satisfied with their existing teaching load and 77 who were not and who recommended what they considered a more suitable teaching load composed the group considered for teachers' recommended load. The sample of 203 high school teachers was used to determine existing teaching load.



TABLE XXXVII  
GROUPS USED FOR DETERMINING RECOMMENDED AND  
EXISTING TEACHING LOADS

Group	Number
Principals	70
Teachers	
(a) Satisfied with existing load .....	80
(b) Dissatisfied with existing load and who recommended a more ideal load .....	77
Total	157
Group* for existing teaching load	203

\*Note: This includes teachers under "a" and "b" from the previous group.



Recommended assigned classroom instruction time is presented in Table XXXVIII. The range in recommended assigned classroom instruction time by principals varies from a low of 12.00 to a high of 26.00 hours per week. The recommended time proposed by the teachers varies from a low of 10.00 to a high of 30.00 hours per week. A considerable range in recommended assigned classroom instruction time exists for both groups. The median recommended time by principals is 20.00 hours while by teachers it is 20.25 hours per week. The medians recommended by both groups are less than the existing median of 21.63 hours per week. The median test revealed that there is a significant difference, at the .05 level, between the principals' recommended time and the existing classroom instruction time for teachers. There also exists a significant difference, at the .01 level, between teachers' recommended and existing teacher assigned classroom instruction time. The recommendations by principals and teachers are significant as compared to existing assigned classroom instruction time and are for a decrease in assigned classroom instruction time.





TABLE XXXVIII  
CLASSROOM INSTRUCTION TIME AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Classroom Instruction		Significance*
	Range	Median	
Principals	12.00 to 26.00	20.00	.05
Teachers	10.00 to 30.00	20.25	.01

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to the teachers' actual median classroom instruction time of 21.63 hours per week as calculated in Chapter IV.



Recommended supervision time for teachers is presented in Table XXXIX. The principals' recommendations range from 0.00 to 12.00 hours per week. The teachers' recommendations range from 0.00 to 10.00 hours per week. The principals' recommended median time is 2.75 hours per week while the median time recommended by teachers is 2.42 hours per week. The existing median supervision time is 2.48 hours per week. The median test between the principals' recommended time and the existing time and between the teachers' recommended time and existing time revealed no significant difference, at the .05 level, between the groups tested. Neither principals nor teachers recommend any particular change from the existing amount of supervision being done by teachers.



TABLE XXXIX  
SUPERVISION TIME AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Supervision Time		Significance*
	Range	Median	
Principals	0.00 to 12.00	2.75	nil
Teachers	0.00 to 10.00	2.42	nil

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to teachers' actual median supervision time of 2.48 hours per week as calculated in Chapter IV.



Preparation time for lessons and materials as recommended by principals and teachers is presented in Table XXXX. The range in recommended teacher preparation time is from 0.00 to 14.00 hours per week by principals and 0.00 to 18.00 hours per week by teachers. The median recommended teacher preparation time is 5.50 hours per week as recommended by principals and 6.00 hours per week as recommended by teachers. The existing median teacher preparation time is 7.48 hours per week. The median test revealed a significant difference, at the .01 level, between the principals' recommended time and existing preparation time. There also exists a significant difference, at the .05 level, between the teachers' recommended preparation time and the existing preparation time. The recommendations by principals and teachers are significant as compared to existing teacher preparation time and are for a decrease in the median time required by teachers to prepare lessons and materials for classroom use.





TABLE XXXX

PREPARATION TIME AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Preparation Time		Significance*
	Range	Median	
Principals	0.00 to 14.00	5.50	.01
Teachers	0.00 to 18.00	6.00	.05

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to teachers' actual median preparation time of 7.48 hours per week as calculated in Chapter IV.



Marking time as recommended by principals and teachers is presented in Table XXXXI. The principals' recommended marking time ranges from 0.00 to 12.00 hours per week while the teachers' recommended marking time ranges from 0.00 to 15.00 hours per week. The median marking time, as recommended by principals, is 4.00 hours per week. The teachers recommend a median marking time of 5.00 hours per week. The existing median marking time is 5.43 hours per week. The median test between the principals' recommendation and existing marking time revealed a significant difference, at the .01 level. The median test between the teachers' recommendation and existing marking time revealed no significant difference. Principals recommend a decrease in the amount of time required to mark examinations and assignments while the teachers recommend no significant change from the existing median time required to mark examinations and assignments.



TABLE XXXXI  
MARKING TIME AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Marking Time		Significance*
	Range	Median	
Principals	0.00 to 12.00	4.00	.01
Teachers	0.00 to 15.00	5.00	nil

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to teachers' actual median marking time of 5.48 hours per week as calculated in Chapter IV.



Extracurricular time for teachers as recommended by principals and teachers is presented in Table XXXXII. The range in principals' recommended time is from 0.00 to 7.00 hours per week. The teachers' recommended time ranges from 0.00 to 12.00 hours per week. The recommended median time to be spent on extracurricular activities per week by teachers is 2.00 hours, as recommended by principals, and 1.75 hours, as recommended by teachers. The existing median time is 1.00 hour per week. The median test revealed a significant difference, at the .05 level, between the recommended time by principals and the existing time spent by teachers on extracurricular activities. A significant difference, at the .01 level, also exists between the time recommended by teachers and the existing time spent by teachers on extracurricular activities. Both principals and teachers recommend that teachers increase the amount of time spent on extracurricular activities.





TABLE XXXXII  
EXTRACURRICULAR TIME AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Extracurricular Time		Significance*
	Range	Median	
Principals	0.00 to 7.00	2.00	.05
Teachers	0.00 to 12.00	1.75	.01

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to teachers' actual median extracurricular of 1.00 hour per week as calculated in Chapter IV.



The total teaching load as recommended by teachers and principals is presented in Table XXXXIII. The time recommended by principals ranges from 25.00 to 49.00 hours per week. A range of 24.58 to 51.50 hours per week is recommended by the teachers. The principals recommend a median time of 39.50 hours per week while the teachers recommend a median time of 40.00 hours per week. The existing median time for teachers is 43.27 hours per week. The median test revealed a significant difference, at the .01 level, for both the teachers' and principals' recommendations as compared to the existing teaching load. The recommendations by both principals and teachers are significant as compared to existing total teaching load and are for a decrease in the median time required to complete the various teaching duties required of teachers.



TABLE XXXXIII  
TOTAL TEACHING LOAD AS RECOMMENDED BY  
TEACHERS AND PRINCIPALS

Group	Total Teaching Load		Significance
	Range	Median	
Principals	25.00 to 49.00	39.50	.01
Teachers	24.58 to 51.50	40.00	.01

\*Note: The calculation of significant difference was based upon a comparison of principals' recommendation and teachers' recommendation to teachers' actual median total teaching load of 43.27 hours per week as calculated in Chapter IV.



A comparison of existing teaching loads and recommended teaching loads is presented in Figure 8. The greatest percentage of existing teaching loads and also recommended teaching loads fall into the range of time from forty but less than forty-five hours per week. No group recommends, nor does there exist, teaching loads under twenty-five hours per week. The maximum recommended time is less than fifty hours by principals and less than fifty-five hours by teachers while some existing teaching loads exceed sixty-five hours per week. The loads as recommended by teachers and principals tend to correspond fairly closely and tend to be skewed to the left of the existing teaching loads. The difference between existing and recommended teaching loads does not appear to be too great but is great enough to cause considerable discontent among teachers.





Percentage  
of Total

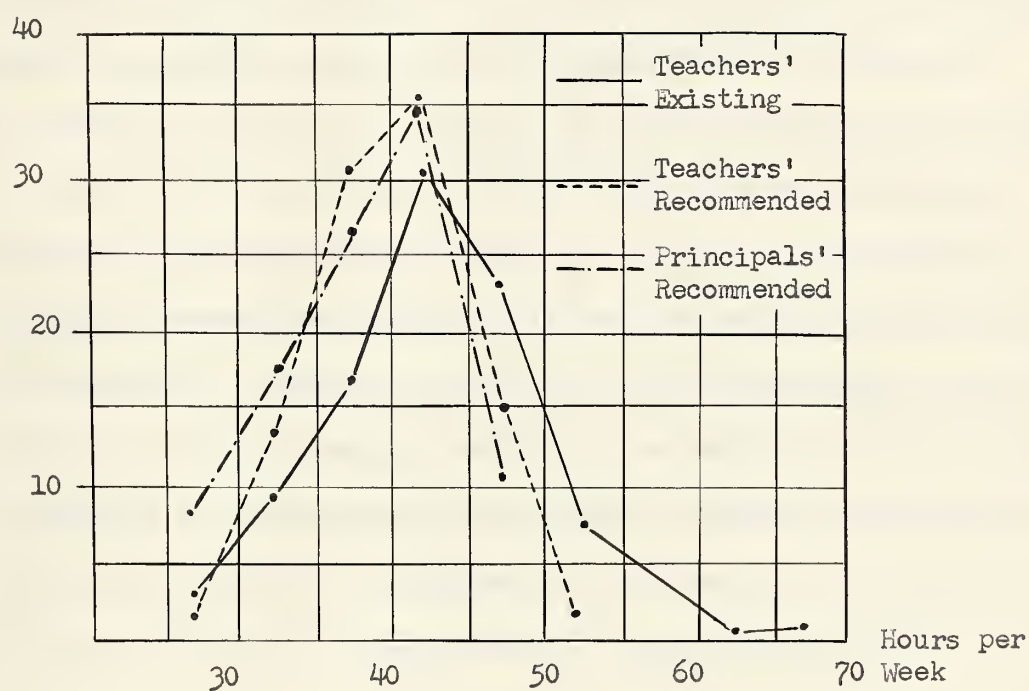


FIGURE 8

DISTRIBUTION OF EXISTING AND RECOMMENDED TEACHING LOADS FOR  
A SAMPLE OF ALBERTA HIGH SCHOOL TEACHERS



### Summary

A significant difference existed between teachers' and principals' recommendations and the existing teaching time required for classroom instruction and for the preparation of lessons and materials. Both groups recommended a decrease in the time required to perform these activities. Neither principals nor teachers recommended a significant change from existing time required for supervision. Principals' recommendation for the time required to mark examinations and assignments was significant as compared to existing time for this duty and was for a decrease in time spent on this activity. Teachers recommended no significant change from existing time spent on marking examinations and assignments. Teachers and principals both recommended a significant increase in the time spent by teachers on extracurricular activities. The recommended total teaching load by both teachers and principals was significantly different as compared to existing total teaching load and was for a decrease in the time spent on total teaching load.



## CHAPTER XI

### SUMMARY AND CONCLUSIONS

A knowledge of the various aspects of teaching load can be of value to school administrators. An administrator can use this knowledge of teaching load to assign a fair and equitable distribution of teaching duties among teachers which should improve teacher morale. This should result in increased efficiency within the school system.

#### Conclusions

The purpose of this study was to examine: (a) the effect of the factors of subject field, teaching experience, teacher training, sex, and size of high school on the median hourly work-week of teachers, (b) the main areas of complaint that teachers have concerning their teaching load, and (c) teachers' and principals' estimation of a suitable teaching load. Consequently, this section on conclusions is largely a summary and interpretation of the findings. The following conclusions resulted from an examination of the data obtained on the teaching loads of a sample of Central Alberta high school teachers.

1. As reported by teachers the average teacher worked in excess of forty hours per week. Teaching loads ranged from 26.00 to 68.00 hours per week with the median time being 43.27 hours per week. Teaching loads of less than 40.00 hours per week comprised 29.6 per cent of the sample while 15.5 per cent of the teachers reported a teaching



load of 50.00 hours or more per week. While considerable variation in teaching load existed 52.9 per cent of the teachers had a teaching load within five hours of the median time for all teachers.

2. Subject field is an existing but very weak factor in influencing total teaching load. A significant difference, at the .05 level, existed only for the time spent on total teaching duties by the teachers in the Home Economics - Industrial Arts group as compared to teachers in all other subject fields. The teachers in the Home Economics - Industrial Arts group spent significantly less time on total teaching duties than did the other teachers.
3. The factors of teaching experience, teacher training, sex, and size of high school are not factors in influencing total teaching load. No significant differences existed between the time spent on total teaching duties by teachers (a) with varying years of teaching experience, (b) with varying years of training, (c) of either sex, and (d) from variously sized high schools, as compared to all other teachers. Although total teaching load was not influenced by these factors some of the duties within these loads were influenced by these factors. An example of this was the time spent on extra-curricular activities. Three instances occurred of significant differences between the time spent on extra-curricular activities. Significant differences between the





time spent on other specific teaching duties also occurred but less frequently than for extracurricular duties.

4. The degree of teacher satisfaction with teaching load depends upon the total time involved in performing the various teaching duties. Of the teachers surveyed 40.8 per cent indicated that they were dissatisfied with their teaching load. Since the examination of the factors that might influence total teaching load revealed only one case of a significant difference in total teaching time - the Home Economics - Industrial Arts group as compared to all other groups - these factors should be excluded as direct causes of teacher dissatisfaction with total teaching load. When the total teaching load was compared to the degree of teacher dissatisfaction an apparent association occurred. As the teaching load increased so did the degree of teacher dissatisfaction. For teaching loads of 35.00 hours or more but less than 40.00 hours 20.0 per cent of the teachers were dissatisfied; when the teaching loads were 45.00 hours or more but less than 50.00 hours 53.1 per cent of the teachers were dissatisfied; and when the loads were 60.00 hours or more 100 per cent of the teachers were dissatisfied.
5. An unequal distribution of extracurricular activities existed among teachers. Of the teachers surveyed 34.9 per cent reported doing no extracurricular work. A significant difference existed between the time spent on extracurricular



activities by: (a) teachers with 0 years teaching experience as compared to all other teachers, (b) teachers with 1 or 2 years teaching experience as compared to all other teachers, and (c) male teachers as compared to female teachers.

Teachers with 0 years teaching experience, 1 or 2 years teaching experience, and male teachers spent significantly more time on extracurricular activities. Extracurricular activities in most schools, apparently, are treated as a voluntary duty with the willing teachers accepting this duty.

6. A decrease in the median hourly work-week for teachers was recommended by both principals and teachers. These recommendations were significant as compared to existing teaching load. Teachers recommended a decrease to 40.00 hours while principals recommended 39.50 hours as the median weekly teaching load.

### Discussion of Results

Since an examination of the factors of subject field, teaching experience, teacher training, sex, and size of high school revealed only one instance of a significant difference in total teaching time, consideration of these factors in total teaching load is of dubious value. A direct relationship existed between teaching load and teacher dissatisfaction. Attempts to improve teacher satisfaction should be based upon changing total teaching load. This can be achieved by adjusting various duties composing the total teaching load and/or achieving a



fairer distribution of existing duties. Although hours per week spent in the activities of a professional occupation is not the best criteria by which to judge a profession, it is a convenient starting point to analyze the duties of a professional position.

A possibility exists, however, that various factors may not influence teaching load but may produce some undesirable features within the load that may be responsible for some of the teacher dissatisfaction. Teachers desire a reasonable teaching load and if some particular duty is especially demanding of a teacher's time the teacher may refuse to spend the felt necessary time on that duty or reduce the time on some other duty to obtain the necessary time and yet retain a reasonable teaching load. This could produce a reasonable total teaching load yet leave undesirable features for that load. Factors not examined, such as the stress and strain of teaching various subjects, class sizes, and coeducational groups, may have an influence upon teacher satisfaction for the existing teaching load.

The considerable difference in teacher satisfaction for the existing work-week for teachers from the various groups makes interesting speculation. No significant difference existed between the total work-week of male and female teachers yet the male teachers were considerably more dissatisfied. A greater percentage of female teachers may be single freeing them from family responsibilities. This would help prevent teaching duty conflicts with family responsibilities. Speculation as to the cause for differences in satisfaction for other groups could also be made. Underlying reasons for these differences were not determined but speculation as to their cause proves of some interest.





The following recommendations are based upon the conclusions as previously stated in this chapter.

1. Classroom instruction time for high school teachers be reduced so that the total assigned classroom instruction time will be at or near twenty hours per week. The over-all effect of reducing classroom instruction time and consequent reduction in the tasks associated with classroom instruction should be a reduction of two to three hours in total teaching load. This would bring the median teaching load near the time as recommended by teachers and since the total teaching load would be near the suitable teaching load as envisaged by the majority of teachers, teacher morale should be promoted and teacher satisfaction would be increased.
2. Extracurricular activities should be treated as a normal teaching duty. Treatment of extracurricular activities as a voluntary duty results in teaching loads between which unfavorable comparisons can be made. This causes increased teacher dissatisfaction and decreased teacher morale. Administrators must accept the responsibility of attaining a fair distribution of extracurricular activities among teachers. The total load of a teacher must also be taken into consideration in assigning extracurricular duties.

#### Problem for Further Study

The field of teaching load in educational administration in Canada is largely an unexplored territory. Many aspects of teaching load need to





be studied to develop an adequate body of knowledge on this topic.

1. A study should be made to determine the relationship between class size and teaching load. In the study completed the most frequent complaint of teachers was found to be that the number of students in the classes being taught was too great. Large classes could cause a marked increase in the time required to mark examinations and assignments, perform various clerical tasks, and even the time spent on extracurricular activities. Increasing the time spent on these activities would tend to increase teaching load and consequently increase teacher dissatisfaction. Tending to support this hypothesis is the observation that the Home Economics - Industrial Arts group spent significantly less time on marking examinations and assignments and on supervision as compared to all other groups and consequently had a significantly lower teaching load with a much decreased degree of teacher dissatisfaction. Since large class size was the most frequent complaint of the teachers surveyed and since class size could cause a considerable change in the time required to perform various duties within the teaching load and consequently on the time required for total teaching load, a study should be made to determine the effect of class size on teaching load.



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APPENDIX

## TEACHER QUESTIONNAIRE

( ✓ ) For the following three questions place a check by the item that applies to you.

1. Sex  
Male\_\_\_\_\_ Female\_\_\_\_\_

2. Age  
30 or under \_\_\_\_\_  
31 to 40 \_\_\_\_\_  
41 to 50 \_\_\_\_\_  
Over 50 \_\_\_\_\_

3. Type of school  
City \_\_\_\_\_  
Town \_\_\_\_\_  
Village \_\_\_\_\_  
Graded rural \_\_\_\_\_  
Other (specify) \_\_\_\_\_

For the following questions please fill in the blanks.

4. Number of HIGH SCHOOL teachers in your school. \_\_\_\_\_.
5. During my University training in Education I  
Majored in \_\_\_\_\_  
Minored in \_\_\_\_\_  
Other (specify) \_\_\_\_\_
6. My weekly teaching load is primarily in the following subject fields: \_\_\_\_\_ (\_\_\_\_\_ periods) and secondly in \_\_\_\_\_ (\_\_\_\_\_ periods. Total teaching periods per week \_\_\_\_\_.
7. Years of training. (Include fractional years) \_\_\_\_\_ years.
8. Years of experience. (Not counting present year) \_\_\_\_\_ years.



9. Average time you spend per week in:

- a) Classroom teaching ..... hours minutes  
b) Supervision ..... hours minutes  
c) Preparation of lessons and materials ..... hours minutes  
d) Marking examinations and assignments... hours minutes  
e) Other activities carried on during school hours (Students' Union, guidance, clerical, etc.)..... hours minutes  
f) Extracurricular carried on out of school hours (athletics, drama, clubs)..... hours minutes  
g) Staff meetings, meetings to organize research projects ..... hours minutes  
h) Activities connected with the school program but not considered as part of a teacher's necessary duties. i.e. Home and School Association ..... hours minutes

Total ..... hours minutes

## 10. What is your feeling concerning this load?







## QUESTIONNAIRE FOR PRINCIPALS

For the first three questions place a check ( ✓ ) by the item that applies to you.

## 1. Sex

Male \_\_\_\_\_ Female \_\_\_\_\_

## 2. Age

30 or under \_\_\_\_\_  
31 to 40 \_\_\_\_\_  
41 to 50 \_\_\_\_\_  
Over 50 \_\_\_\_\_

## 3. Type of school

City \_\_\_\_\_  
Town \_\_\_\_\_  
Village \_\_\_\_\_  
Graded rural \_\_\_\_\_  
Other (specify) \_\_\_\_\_

For the following questions please fill in the blanks.

4. Number of HIGH SCHOOL teachers in your school.  
(Include yourself) \_\_\_\_\_ High School Teachers

5. During my University training in Education I  
Major in \_\_\_\_\_  
Minor in \_\_\_\_\_  
Other (specify) \_\_\_\_\_

6. Years of training. (Include fractional years) \_\_\_\_\_ years.

7. Years of teaching experience. (Not counting the present year) \_\_\_\_\_ years.

8. Number of years as principal. (Not counting the present year) \_\_\_\_\_ years.





9. What would you consider as a suitable teaching load for high school teachers? You may use the following form or you can arrange your answer to your own satisfaction.

Average number of hours per week spent in:

- a) Classroom teaching ..... \_\_\_\_hours\_\_\_\_minutes
- b) Supervision ..... \_\_\_\_hours\_\_\_\_minutes
- c) Preparation of lessons and materials .... \_\_\_\_hours\_\_\_\_minutes
- d) Marking examinations and assignments .... \_\_\_\_hours\_\_\_\_minutes
- e) Other activities carried on in school  
hours. (Students' Union, guidance,  
clerical, etc.) ..... \_\_\_\_hours\_\_\_\_minutes
- f) Extracurricular carried on out of  
school hours. (Athletics, drama, clubs) \_\_\_\_hours\_\_\_\_minutes
- g) Staff meetings, meetings to organize  
research projects. .... \_\_\_\_hours\_\_\_\_minutes
- h) Activities connected with the school  
program but not considered as a  
necessary part of a teacher's duties.  
i.e. Home and School Association ..... \_\_\_\_hours\_\_\_\_minutes

Total \_\_\_\_hours\_\_\_\_minutes

10. Additional comments that you may wish to make.



## RELIABILITY CHECK THROUGH PRINCIPALS

Name of Teacher \_\_\_\_\_ School \_\_\_\_\_

For the following three questions place a check ( ✓ )  
by the item that applies to the teacher.

1. Sex  
Male \_\_\_\_\_ Female \_\_\_\_\_

2. Age  
30 or under \_\_\_\_\_  
31 to 40 \_\_\_\_\_  
41 to 50 \_\_\_\_\_  
Over 50 \_\_\_\_\_

For the following questions please fill in the blanks.

3. During University training this teacher:  
Major in \_\_\_\_\_  
Minor in \_\_\_\_\_  
Other (specify) \_\_\_\_\_
4. Teacher's weekly teaching load is primarily in the  
following subject fields: \_\_\_\_\_ (\_\_\_\_ periods) and  
secondly in \_\_\_\_\_ (\_\_\_\_ periods). Total teaching  
periods per week \_\_\_\_\_.
5. Years of training. (Include fractional years) \_\_\_\_ years.
6. Years of experience. (Not counting present year) \_\_\_\_ years.
7. Your estimation of the average time this teacher spends per week in:
- a) Classroom teaching ..... \_\_\_\_ hours \_\_\_\_ minutes
  - b) Supervision ..... \_\_\_\_ hours \_\_\_\_ minutes
  - c) Preparation of lessons and materials..... \_\_\_\_ hours \_\_\_\_ minutes
  - d) Marking examinations and assignments..... \_\_\_\_ hours \_\_\_\_ minutes
  - e) Other activities carried on in  
school hours. (Students' Union,  
guidance, clerical, etc.) ..... \_\_\_\_ hours \_\_\_\_ minutes
  - f) Extracurricular carried on out of  
school hours. (Athletics, drama,  
clubs) ..... \_\_\_\_ hours \_\_\_\_ minutes
  - g) Staff meetings, meetings to  
organize research projects ..... \_\_\_\_ hours \_\_\_\_ minutes
  - h) Activities connected with the  
school program but not considered  
as part of a teacher's necessary  
duties. i.e. Home and School  
Association. .... \_\_\_\_ hours \_\_\_\_ minutes
- Total \_\_\_\_ hours \_\_\_\_ minutes











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